

MANAGEMENT METHODS

MARCH 1957

PRACTICAL SOLUTIONS TO ADMINISTRATIVE PROBLEMS



IN THIS
ISSUE

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page 42

How to sell the sizzle of your site
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Always sends you home relaxed...

Goodform® COMFORT MASTER DELUXE



This aluminum executive chair with five-way comfort control does the trick

Sure, it's been one of those days . . . a lot of tension and long hours at your desk. But, when it's over and you're feeling almost as fresh as you did in the morning, you'll be glad you spent that day in a Comfort Master Deluxe.

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means a lifetime of beauty and service.

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MODE-MAKER, GENERALAIRE, 1600 LINE DESKS • GOODFORM ALUMINUM CHAIRS
SUPER-FILER MECHANIZED FILING EQUIPMENT • GF ADJUSTABLE STEEL SHELVING

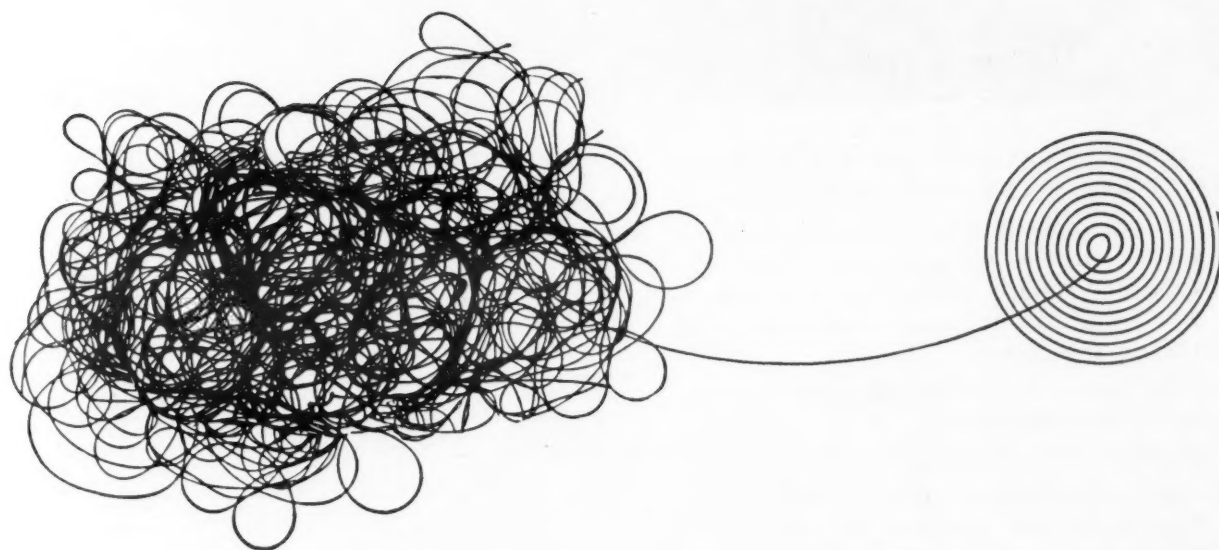
GF metal business furniture is a **GOOD** investment

(Circle number 580 for more information)





The Olivetti Printing Calculator unsnarls tangled business figures quickly and economically. It automatically multiplies and divides (without mental counting of *any* kind, including counting for positioning), is also a speedy 10-key adding machine, with automatic credit balance. Easy to operate, it is literally two machines in one. The printed tape is a permanent record, for fast checking, filing or attaching to work papers. Many companies have standardized on this rugged, proven machine, which is guaranteed for 12 months instead of the usual 90 days.



Are you also acquainted with Olivetti's other printing calculator, with the double register and the "memory"? With Olivetti's accounting and posting machines? Hand, electric and duplex adding machines? Electric, standard and portable typewriters? Remarkably efficient and dependable, they require a minimum of maintenance; service and spare parts are quickly available through dealers in 48 states. Branch offices and showrooms in New York, Chicago and San Francisco. Olivetti Corporation of America, 580 Fifth Ave., New York.

(Circle number 583 for more information)

olivetti

Why use a \$14²⁵ crate where a \$2⁵⁰ skid will do? Ship United!



By taking full advantage of United Air Freight economies, you *save on shipping charges.*

For example: Skid and a crate for this 300-lb. electric motor would cost \$14.25. Shipped by expedited surface carrier from New York to San Francisco, total cost is \$83.49. Shipping time: 4 to 6 days.

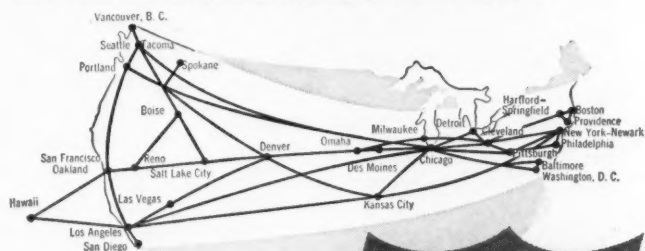
By United Air Freight, the same motor requires skid only (\$2.50). Total cost of shipment is \$82.30. Shipping time: 24 to 36 hours.

And consider these advantages—DC-7 Mainliner flights and 30,000-lb.-capacity DC-6A Cargoliners coast to coast, Reserved Air Freight (guarantees the space you need on the flight you want), single simplified airbill, other United "firsts."

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SAN FRANCISCO to BOSTON	\$27.00

*These are the rates for many commodities. They are often lower for larger shipments. Rates shown are for information only, are subject to change, and do not include the 3% federal tax on domestic shipments.



Door-to-door service

SHIP FAST...SHIP SURE...SHIP



For service, information, or free Air Freight booklet, call the nearest United Air Lines Representative or write Cargo Sales Division, United Air Lines, 36 South Wabash Avenue, Chicago 3, Illinois.

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MANAGEMENT METHODS

MANAGEMENT METHODS

MARCH 1957 • VOLUME 11 No. 6

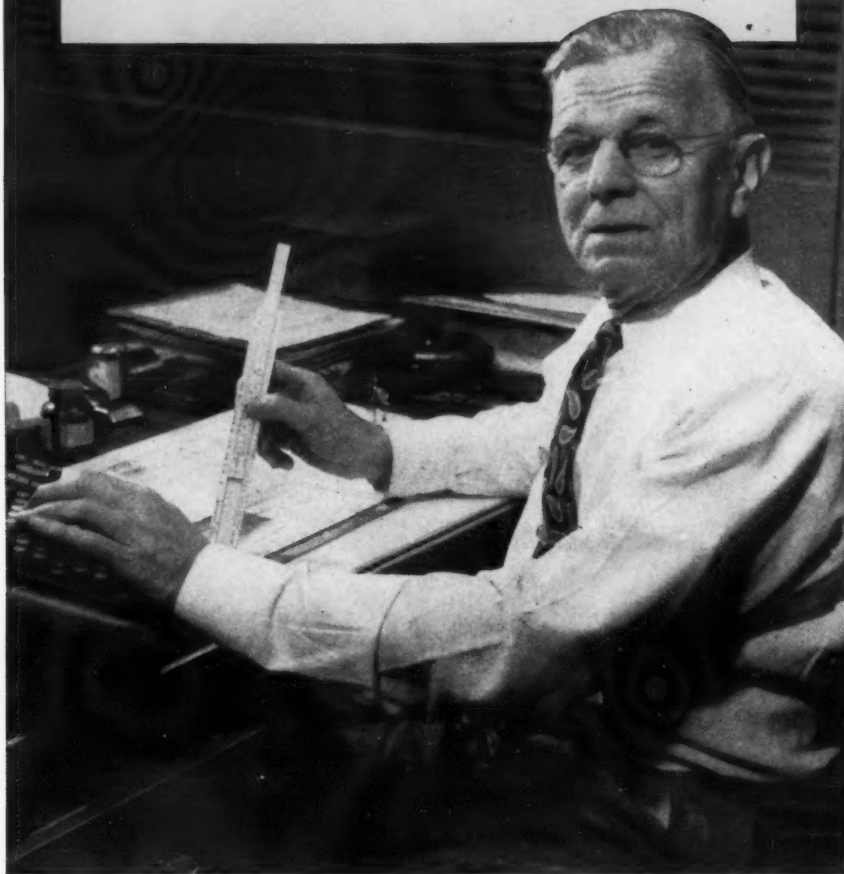
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A Mayflower Move Is a Good Move!



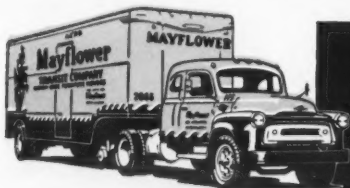
● Whether you're moving one of your company's research experts, a salesman, an engineer or a top executive, "a Mayflower Move is a good Move!" That's what scores of Mayflower customers tell us every day.

One satisfied shipper, for example, after a move from Boulder, Colorado to Wichita, Kansas, wrote us:

"It would be impossible to improve upon the service we received. I appreciated, especially, the personal interest the van operator displayed in each article moved."

Next time you have company personnel to move, make a good move. Call Mayflower!

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FURNITURE MOVERS

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Policy re manuscripts: The object of MANAGEMENT METHODS is to offer practical solutions to administrative problems. For that reason we never highlight a problem without offering at least a partial solution or a recommended course of action. Whenever possible, we like to offer the reader something he can do right now to correct a procedure or solve a problem in his business.

Much of our editorial material comes from business and management specialists, as well as from active businessmen, at all levels of management.

We endeavor to return all manuscripts. However, we assume no responsibility for material not specially requested by us.

MANAGEMENT METHODS

Pennsylvania Industrial Development Authority announces



The Pennsylvania Plan: "100% financing for your new plant"

through Pennsylvania's Community-State Building Programs

A message to Manufacturers seeking a New Plant Site

New 25-year, 2% interest Second Mortgage Loans by the Pennsylvania Industrial Development Authority offer unique assistance to community industrial programs*... help "close the financing gap" to assure low cost 100% financing of your new plant building in Pennsylvania.

Added to commercial First Mortgages, plus funds supplied by local communities — these new loans can reduce demands on your working capital for a new industrial structure.

Over 70 Pennsylvania communities now have fund raising experience in the organizing and capitalizing of industrial buildings. Several plant shells are ready for completion.

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You specify plant construction details. You have the choice of purchase, lease-purchase or straight leasing arrangements on highly attractive terms. You select the type of community that best suits your location requirements.

**110 community-sponsored industrial plants constructed in Pennsylvania since 1945.*

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How P.I.D.A. 2nd Mortgage Funds "close the financing gap"... encourage sound investment by private capital:

Industrial Plant Construction Costs —

Subscribed by local non-profit community-sponsored builder-owner corporations. 20%

2nd Mortgage Loan, Pennsylvania Industrial Development Authority. 30%

1st Mortgage Loan obtained from banks, insurance companies and similar lending institutions. 50%

Total financing, secured through local subscriptions and mortgage loans, without cash investment by the manufacturer. 100%

MORE DATA ON P.I.D.A. 2ND MORTGAGE LOANS

Minimum interest rate, 2% per annum.

Maximum term, 25 years.

Available on up to 30% of industrial plant construction costs.

Made to non-profit community corporations organized to encourage local industrial development. The Authority does not engage in direct construction or ownership.

Limited to Labor-Surplus Areas... assuring a plentiful supply of skilled labor, high productivity, low labor costs... from stable, permanently-rooted small town people.

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Prove
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on your own work,
Free!



**Combines More Fine Features
Than Any Other 10-Key Machine!**

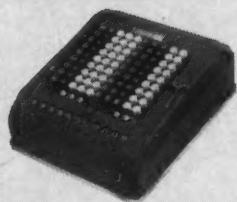
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- Adjustable keyboard angle
- Portable...compact...modern styling

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Firm

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City Zone State

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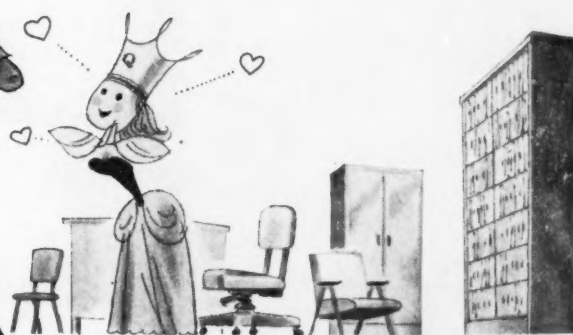
Launcelot was in a test-y mood

"Forsooth," quoths Sir Launcelot (ye industrious Office Furniture Buyer), "this trusty *Royal* Model 1210 Executive Posture Chair doth give one added stature."

"Methinks the quest for such function and comfort bids fair to become a crusade."

Yes, each office King and Queen is sure to be pleased with *Royal*—ye Knight of the Exchequer (thy Prince of ye Pocketbook) . . . guests in thy realm . . . ye Castle Custodians . . . everyone!

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Please send me free:

- ☐ Royal Office Furniture Literature;
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- ☐ Please have a Royal Dealer call.

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Company _____

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... VIA WESTERN UNION



WESTERN UNION

OF PREVIOUS 24 HOURS' OPERATIONS"

PRIVATE WIRES!

CARGO TOTAL				OVER 30 MINS. LATE			
FLIGHT PERFORMANCE							
FLT	FROM-TO	DEPARTURE	PSGRS	STATION	DELAY	SAME	REASON
29	CHI-HNL	5.4	5.9	1.5	0.5	0.5	0.5
39	CHI-LAX	10.5	0.1	0.5	0.5	0.5	0.5
46	HNL-WFO	0.7	2.5	0.5	0.5	0.5	0.5
48	HNL-WFO	0.5	2.5	0.5	0.5	0.5	0.5



The exciting story of United Air Lines' jet-age communications system built and maintained by Western Union

"Yesterday's Revenue Passenger Miles, 13,052,265; Cargo Ton Miles, 346,095; Passenger Load Factor" and so another daily 8 A.M. briefing of United Air Lines top management begins at Denver's Stapleton Airfield. By 8:30 A.M., they will have the *complete* story—facts, figures and data on which to base the day's decisions—made possible by the most advanced private wire system of its kind, engineered by Western Union.

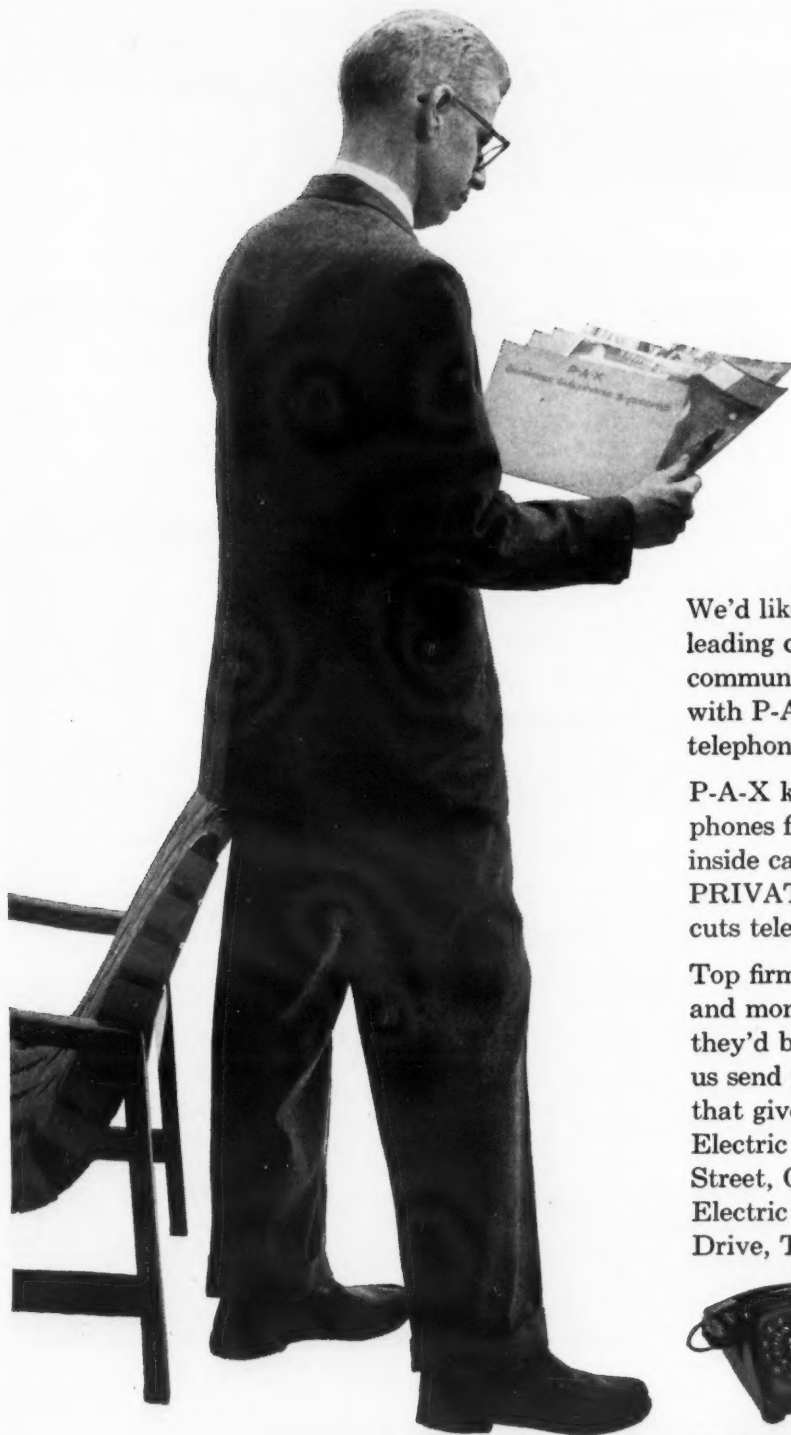
This 27,500 mile private communications network, handling 110,000 messages a day, serves 71 cities on the United system, from New York to San Francisco. It gives United a running summary of operations, maintenance and weather. It enables them to process a complex payroll with ease, and to keep important administrative messages flowing at high speed. It provides United with written records of intra-company communications at an extremely low unit message cost.

Let a Western Union expert analyze your communications needs. No obligation, of course. A collect wire to Western Union, Private Wire Division, New York, will bring you more facts about the unique advantages of a private wire system.



... first in private wire systems

Swap 60 seconds for an idea that may save your company thousands of dollars?



We'd like to show you how a great many leading companies have improved their communications and pocketed sizable savings with P-A-X—the "inside" business telephone system.

P-A-X keeps your present switchboard and phones free for outside calls. Lets you make inside calls in a flash—OVER YOUR OWN PRIVATE TELEPHONE SYSTEM. Sharply cuts telephone operating costs.

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P-A-X business telephone systems

AUTOMATIC ELECTRIC

Originators of the dial telephone • Pioneers in automatic control



(Circle number 590 for more information)

MANAGEMENT METHODS

Does your office empty at 10am?



Cut coffee-break time in half with the new Westinghouse **HOT and COLD** water cooler!



At last you can control coffee-break time in your company—and save up to \$75.00 annually on *every* employee! New Westinghouse HOT-and-COLD serves piping hot water for instant coffee, tea, soups . . . makes the coffee-break possible without a costly "break" in working time. Serves refreshing cold drinking water, too! Just plug it in, no plumbing necessary. Takes only 14 inches square of floor space. Handy Hot-and-Cold Drink File available for instant beverage packs and paper cups.

Call your local Westinghouse Distributor listed in the Yellow Pages of your telephone directory. Or mail coupon today.

**YOU CAN BE SURE...IF IT'S
Westinghouse**

**Westinghouse Electric Corporation, Dept. MM-3
Refrigeration Specialties Division
Springfield 2, Massachusetts**

Gentlemen: Please send me complete information on how the new Westinghouse HOT-and-COLD cuts coffee-break time in half.

Name _____
Company _____
Address _____
City _____ Zone _____ State _____

(Circle number 591 for more information)

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The only thing operating in Department 3 is the cigarette machine. But these men aren't loafers. It's just that no work has reached their department.

Yet in certain other departments there's too *much* to do. Overtime on the one hand . . . idle time on the other. Think what scheduling like that does to profits!

With the Keysort Plant Control Plan, management would be getting full production right now. For PCP could have prevented this situation — *right in the office*.

PCP not only helps management plan in

advance, it helps *you* as well. With a minimum clerical burden, you achieve greater reporting accuracy — flexibly, easily. Your office people simply punch pertinent information into the Keysort cards . . . Keysort them . . . and summarize *direct* to reports. There's no transcribing . . . no costly, time-consuming intermediate steps. You work with the original document only. Information is gathered daily — as it happens. Management gets it *on time*. And at remarkably low cost.

The nearby McBee man has a presentation which will show you how it's done. Phone him, or write us.

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(Circle number 592 for more information)



When you air condition, do it right, with

Individual Office Temperature Control

HERE'S THE control system that gets the most for everyone—out of any air conditioning investment.

Your employees enjoy truly comfortable, energetic working conditions. Your customers are put into a more pleasant and receptive mood. And if you have tenants—they are more satisfied, too.

In public areas, multi-desk offices and lounges, strategically placed Honeywell Thermostats eliminate pockets of discomfort. And there's a Honeywell Thermostat in each individual office to provide the *exact* temperature desired.

Honeywell Room Thermostats save you money, too. They eliminate winter heat waste caused by the opening of doors and windows. In the summer—Honeywell Individual Office Thermostats prevent overcooling, thus reducing power costs.

Installation is simple, too—in both new and existing buildings. With all these comfort advantages and cost reductions, the installation amortizes quickly. So do right by your employees, by your customers and by your pocketbook. Install Honeywell Individual Room Temperature Control.



*The Honeywell Round—
world's most popular thermostat.*

MINNEAPOLIS
Honeywell



First in Controls

112 offices across the nation

.....MAIL THIS COUPON TODAY.....

MINNEAPOLIS-HONEYWELL REGULATOR CO.
Dept. MM-3-57, 2727 4th Ave., South
Minneapolis 8, Minnesota
Gentlemen:

Without Cost or Obligation

Please have one of your local Sales Engineers stop by to advise us on costs and possible applications for Honeywell Individual Room Temperature Control.

Name _____ Title _____

Address _____

City _____ State _____

(Circle number 593 for more information)

point and
counter
point



LETTERS TO THE EDITOR

What union members think

SIR: 'Twas a cogent question posed on page 26 of the current (January, 1957) issue of *MANAGEMENT METHODS*—"Do you really know what your union member thinks?" Authoritative answers, I am sure, would not only be valuable to men of management but equally useful to labor leaders. The "fresh evidence" presented falls far short of being authoritative and the conclusions drawn do not properly follow from the limited "evidence."

We suggest that the question again be referred to the University of Minnesota's study group for a more objective "survey"; one that possesses some depth; one that poses questions designed to reveal real attitudes, opinions. To ask, "Do unions block progress?" is like asking, "Are you opposed to good?" I am surprised that only 94% answered *no*. . . .

I suggest also that the lead anecdote re: the farmer and his cow was as inadequate as was the "survey" and the labored conclusions. Cows—dumb animals that they are—will follow the belled animal right over a cliff. Union members, on the other hand, are men and women; individuals who exercise their God-given rights to think for themselves and differ in their opinions and attitudes one from the other and with their union officers when they see fit.

Surveys—sound, scientifically designed and tested, objective and with properly drawn samples—are invaluable. The findings from such surveys—adequately documented and wisely interpreted—will, we hope, continue to be an important part of your excellent magazine. Save us, though, from such as that currently reported.

VIRGIL L. RANKIN
VIRGIL L. RANKIN ASSOCIATES
BABSON PARK, MASS.

■ A copy of Mr. Rankin's letter was forwarded to the University of Minnesota for comment and the following reply was received:

SIR: Let me make several observations on Mr. Virgil L. Rankin's com-

Answer to your 64 Acre Question

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Big Opportunity**

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Let B&O's long and varied experience in plant location go to work for you!

B&O's Land of Big Opportunity is the proved center for national distribution . . . resources are tremendous . . . power plentiful, rail transportation fast and dependable. Without question, we can suggest a site to suit! Look them over on the ground, or see them at your desk in 3-dimensional color and air views. Ask our man!

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ON REQUEST FROM
The B&O Railroad,
Baltimore 1, Md.



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Baltimore & Ohio Railroad

Constantly doing things—better!

(Circle number 594 for more information)

Short cuts with Recordak Microfilming

Latest reports on how this low-cost photographic process is simplifying routines for more than 100 different types of business . . . thousands of concerns



KEEPS TRACK OF MILLIONS DAILY

NEW YORK, N. Y.

The operations of hundreds of clerks in Merrill Lynch, Pierce, Fenner and Beane's 116 offices are backed up by Recordak Microfilming in the Home Office cashier's department.

Outgoing stock and bond certificates worth millions—along with the related charge-out orders—are whisked through a Recordak Microfilmer before being forwarded to customers and other brokers. (Hundreds of front-and-back pictures are made in a minute. Films are developed by local Recordak Processing Station . . . are ready for use the next morning.)

Thus, should a "common" stock certificate ever be charged out as "preferred," the error can be spotted in a Recordak Film Reader in minutes—saving days or weeks of tracing, and sparing customers considerable inconvenience.



TAKES THE PRESS OUT OF PAPERWORK

ROCHESTER, N. Y.

Lilac Laundry and Dry Cleaning saves more than \$5,000 per year by microfilming the tickets made out each day by its 16 drivers and clerks in 5 stores.

These pictures replace a ledger record—with a 5-part written description of each ticket—that took all day to compile. Takes about 15 minutes now to make a photographically accurate record of all tickets in route and store sequence.

Lilac also did away with carbon copies by microfilming its charge account statements. Saves on accounts receivable insurance, too.



URNS MILKMAN'S RECORDS INTO BILLS

McKEESPORT, PA.

The Menzie Dairy cuts billing costs in half by microfilming its drivers' route sheets and sending them out to customers as their monthly bills.

This eliminates days of tedious billing and the need for costly posting machines and files. And it gives the customer the actual record which the milkman compiled from day to day, all but ending questions about charges.

The Menzie Dairy uses a Recordak Reliant Microfilmer (illustrated below) which takes pictures of 40 route sheets for one cent . . . and has a unique high-speed automatic feeder that prevents "double feeding."

Note: Recordak has a complete line of microfilmers to match all needs—priced as low as \$550. Low rental plan, too.

VALUABLE FREE BOOKLET

It'll pay you to read "Short Cuts that Save Millions." Chances are Recordak Microfilming is now simplifying routines just like yours! Inquiries are invited—no obligation whatsoever!

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(Subsidiary of Eastman Kodak Company)

originator of modern microfilming—
and its application to business

MAIL COUPON TODAY . . .
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Please send free copy of "Short Cuts that Save Millions."

Name _____ Position _____
Company _____
Street _____
City _____ State _____

(Circle number 595 for more information)

CONFIDENTIAL

PLANT LOCATION FACTS

Where to find the labor skills you need

A suitable labor supply, with appropriate skills, is of prime importance in your plant location decisions.

Supplying all the facts about the labor potential at any site in New York State is our business. The data will be complete, accurate and current.

Our data will include a breakdown of the present industrial labor force by skills, sex and age groups, as well as an informed estimate of the percentage of the total labor force presently available. We also will provide characteristic regional rates for the specific job titles you will be considering or the ranges of rates for more general labor requirements. In addition, we will assemble for you a detailed history of labor-management relationships at any specific New York State locality.

Labor won't be your only consideration in deciding on a new plant location. You will want complete facts on markets, water, available sites or buildings, power, fuel, transportation and raw materials. And you will want information on these as they apply to the successful operation of a specific plant.

A tailor-made report

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Our booklet, "Industrial Location Services," explains what we can do for you. To get your free copy, write me at the New York State Department of Commerce, Room 678, 112 State Street, Albany 7, New York.



EDWARD T. DICKINSON
COMMISSIONER OF COMMERCE

ments on your feature article in the January issue entitled "Do you really know what your union member thinks?" since the article is based on research findings contained in our research bulletin #18 entitled "Understanding the Union Member."

1.) Your article effectively points to some of the implications of our findings. A footnote might have stressed that such research findings should be viewed as indicative rather than absolute even though the study represented a variety of unions from a number of states. Anyone reading Bulletin #18 will find on page 6:

"It will be obvious to readers of this bulletin that there are many areas in this field that warrant further study. Additional questions and hypotheses to be tested will come from the findings of studies now being conducted. Much more can be done in accumulating data on existing union policies and practices and relating these to union member attitudes and to member participation."

2) Pages 7 to 9 and 35 to 40 describe the research design, the sampling methods used, etc. An examination of the 77-item questionnaire used in our study will reveal questions covering a wide range of subjects, both "pro" and "con," ranging from moderate to extreme in order to get at differences in intensity of attitudes.

3) We hope Mr. Rankin knows more about unions than he seems to know about cows. A bell is occasionally used on a sheep trained to lead the flock—but cows behave quite independently. Cow bells were used years ago to help the farmer locate his cattle. Cows will not "follow the belled animal right over the cliff."

WALTER H. UPHOFF
RESEARCH ASSOCIATE
INDUSTRIAL RELATIONS CENTER
UNIVERSITY OF MINNESOTA

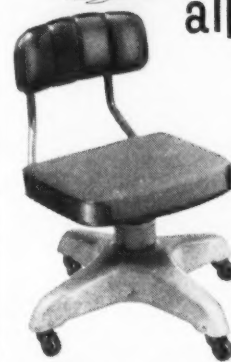
"Why executives fail"

SIR: We have an executive development program at the Air Force Finance Center in which approximately 30 top management civilians participate. We feel that the members of this group would derive much from a thorough review and panel discussion of the article, "Why executives fail" (MM, Nov. '56). It is our intent to give each member a copy . . .

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MANAGEMENT METHODS

(Circle number 596 for more information)



... That's the report received from Mr. Harold W. Young, Asst. Treas., La Salle Extension University, Chicago, Illinois.

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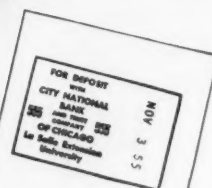
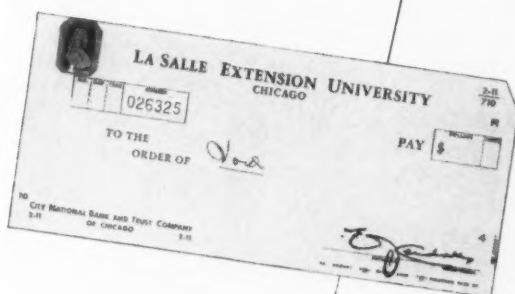
La Salle Extension University also uses a Cummins Check Endorser to eliminate noisy hand stamping of checks for deposit. Checks are endorsed at the same time as they are listed on the deposit ticket, ready for the bank that much earlier.

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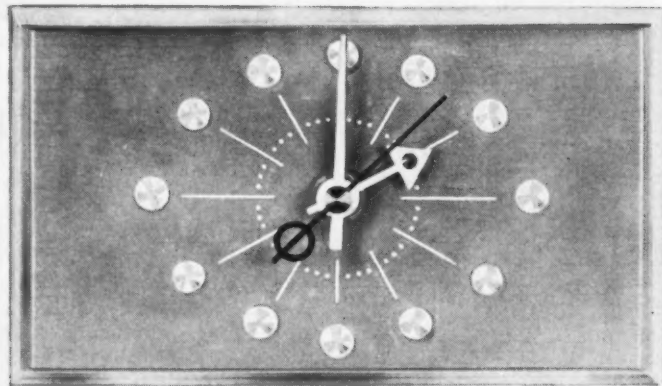
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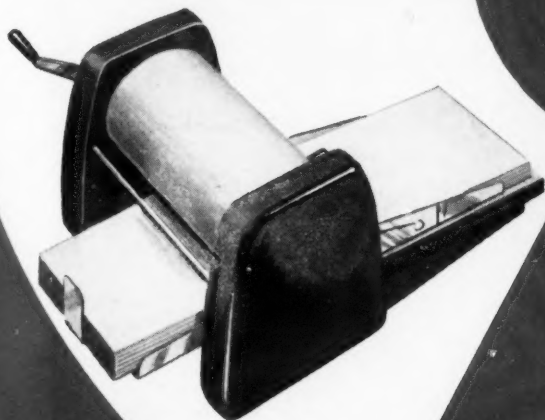
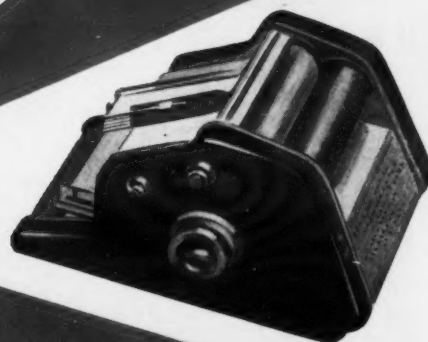
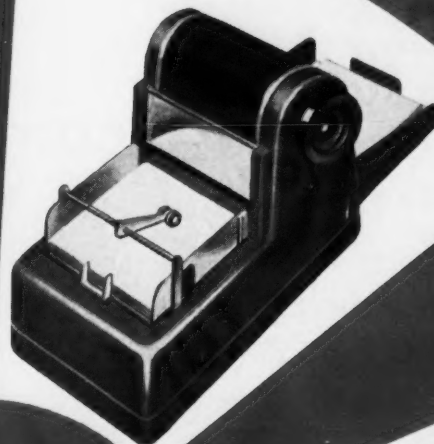
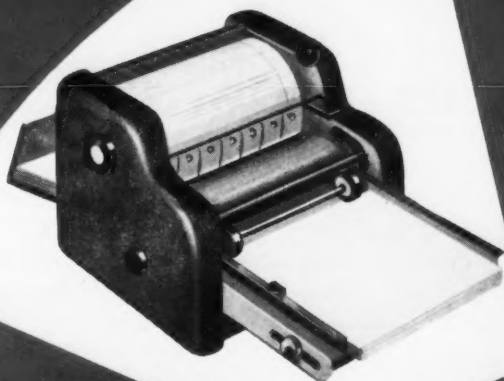
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How companies regard older

Despite a critical shortage of good salesmen, this survey shows that 72% of business and industrial firms refuse to hire the experienced salesman if he's over age 45.

Engineers may be in short supply,* but so are salesmen.

According to a survey just completed by the National Sales Executives, Inc., American business and industry are intensifying the

*See, "How to sell the sizzle of your site," page 34.

WHAT THEY SAID

2,500 NSE MEMBERS ARE ACTIVELY SEEKING 404,580 SALESMEN

	Consumer Route	Business Route	Consumer Specialty	Business Specialty	Retail	Industrial
Salesmen	9,160	30,503	151,360	41,870	4,475	17,716
Trainees	2,897	15,514	92,396	21,046	3,670	13,973
Total	12,057	46,017	243,756	62,916	8,145	31,689

EDUCATION REQUIRED

	College	High School	Grammar School	Other	No Answer
1. Consumer Route	11.2%	76%	4.3%	—	8.5%
2. Business Route	24	65.3	2.3	.9%	7.5
3. Consumer Specialty	17.9	68.4	2.7	1.3	9.7
4. Business Specialty	42	48.3	.8	1.3	7.6
5. Retail	14.3	70	3.1	3.1	9.5
6. Industrial	62.2	30.8	.2	1.4	5.4

EXPERIENCE REQUIRED

	Selling Same Products	Selling Same Type Customers	Customer Following	Inside Experience	No Answer
1. Consumer Route	21.1%	19.8%	1.4%	28.2%	29.5%
2. Business Route	34.7	28.5	—	27.3	9.5
3. Consumer Specialty	22.8	23.7	.9	33	19.6
4. Business Specialty	37.4	24.9	.2	29	8.5
5. Retail	42.8	20.6	3.1	22.3	11.2
6. Industrial	45.4	30.4	1.5	2.5	20.2

PRACTICE BY AGE GROUPS

The Question: "When other considerations are satisfactory, is it your practice to hire men over 35, over 40, over 45, over 50?"

	Will hire over 35	Will hire over 40	Will hire over 45	Will hire over 50
1. Consumer Route	56.8%	20.5%	11.4%	11.3%
2. Business Route	52	23.3	12.4	12.3
3. Consumer Specialty	38.5	18.4	12.4	30.7
4. Business Specialty	49.7	14.6	17.9	17.8
5. Retail	50	15	12.5	22.5
6. Industrial	62.1	16.5	11.4	10

salesmen

salesman shortage by excluding from consideration a large segment of the salesman supply. Those who find themselves excluded are experienced salesmen over age 45.

The survey was conducted among 2,500 of NSE's 28,000 members, representing all sizes of firms in the industrial, wholesale and retail fields. Tabulated responses from all 48 states show:

- The 2,500 NSE member firms alone have an immediate need for more than 400,000 salesmen.

- Starting salary is as high as \$550 per month for new personnel.

- Earnings of the top third of sales forces reaches as high as \$1,500 per month.

Despite the tremendous need, and the bright prospects for young men entering the field, the experienced salesman over 45 must face the fact that 72% of job opportunities are not open to him.

Wasteful folly

This discrimination, says NSE, represents wasteful folly on the part of business and industry.

"The fact that 72% of the companies queried will not hire the over-45 salesman," says an NSE report of the survey, "is incongruous when it is realized that 38% of the entire U. S. working population today is over 45 years of age, and this group is growing larger each year."

Why do almost three out of four firms refuse to consider the older salesman? Major answers given in the questionnaires were:

- Company policy will not permit it—40.7%

- The respondent's own negative attitude toward older men—41.2%

- Pay scale—10.5%

- Various other reasons, such as physical requirements—7.5%

The "pay scale" answers appar-



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fully
automatic
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spreads solution, scrubs, rinses, picks up, dries

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50,000	200 hours	77½ hours	524—2.9 hours
120,000	480 hours	182 hours	530—4.4 hours
300,000	1200 hours	467 hours	537—9.0 hours
1,000,000	4000 hours	1550 hours	560—10.8 hours

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ently mean that the company's are not willing or able to pay older salesmen the compensation they require.

Company-paid retirement plans—often put forward as the reason for the age barrier to older employees generally—was not a major consideration since only 4.9% of the respondents indicated their companies maintain such plans.

Says NSE: "In most instances, older salesmen can bring with them to a new employer much of the very knowledge and experience companies spend years to impart to younger men. Yet it remains clear that American business, although faced with a growing scarcity of young trainee salesmen for grooming into sales management and leadership positions, is refusing to take advantage of the older, more experienced man available for immediate sales openings."

The survey covered other aspects of the selling field.*

So far as car expense is concerned, most companies pay from seven to nine cents per mile, although many provide company cars, especially in the consumer route and industrial classifications. A few pay depreciation allowance plus mileage.

Salesmen's earnings

The highest starting compensation is found in the industrial sales field, while the highest monthly earnings of the top third of the sales force is about the same in the industrial, consumer, specialty and business specialty fields.

Although the survey indicates that starting salaries in the sales profession may not be equivalent to the engineering field, for example, the report highlights the fact that growth potential, salary-wise, is as high as, if not higher than, in any field or profession.

As for educational requirements, college training is being required by a growing number of companies, while a high school education is a necessity in the overwhelming majority of companies. About two-thirds of all industrial sales personnel must have college education.

Successful selling experience,

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Data Sheets are supplemented by an outline of specific information available through Special Reports compiled from the Industrial Survey maintained by the area. New Data Sheets are issued from time to time. As new information develops, Data Sheets are revised to bring them up to date and mailed to those who have the Factfile.

To take advantage of this free information service, address your request to: Alameda County New Industries Committee, Suite A, 1320 Webster Street, Oakland, California.

(Circle number 607 for more information)

based upon the same products and services as offered by the firm to which the individual is applying for a position, is a pre-requisite for hiring. Successful selling to the same type of customer, inside experience which gives insight into customer problems, and sales personality are the next most common experience requisites.

WHAT THEY SAID

A review of
current surveys

Executive reading: domestic and British

Following MANAGEMENT METHODS' recent study of executive reading habits (see MM, Jan. '57), two similar surveys have been conducted, one covering American executives, the other, executives in Great Britain.

The American Management Association found that the typical American businessman spends four hours a day in the office and one hour at home perusing business reports, correspondence, books, newsletters and business magazines. Of his leisure time, about 10 hours a week are devoted to newspapers, magazines and books.

Company presidents and other top officers spend about 4½ hours a day reading; middle managers average half an hour less. The average for sales managers is five hours, for production men, just over 3½ hours. Within each group, however, individuals vary widely; some presidents read only half an hour a day, for example.

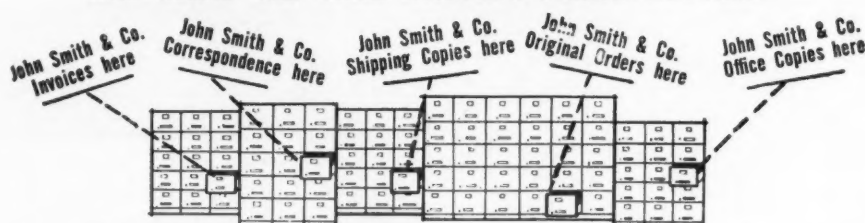
British reading habits

The survey of British firms, conducted by *Business* magazine, showed that about three-fourths of the country's major executives purchase from one to five business books a year, another 15% purchase six or more. About 40% of the executives read from one to five business or technical magazines each month, the others read six or more.

As with Americans, few British business executives—about 8%—are able to handle all of their business reading in the office. About 58% do all this reading at home, and 34% do some at home, some in the office.

m/m

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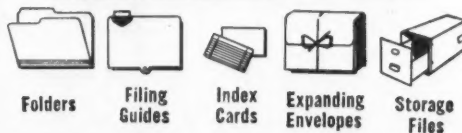
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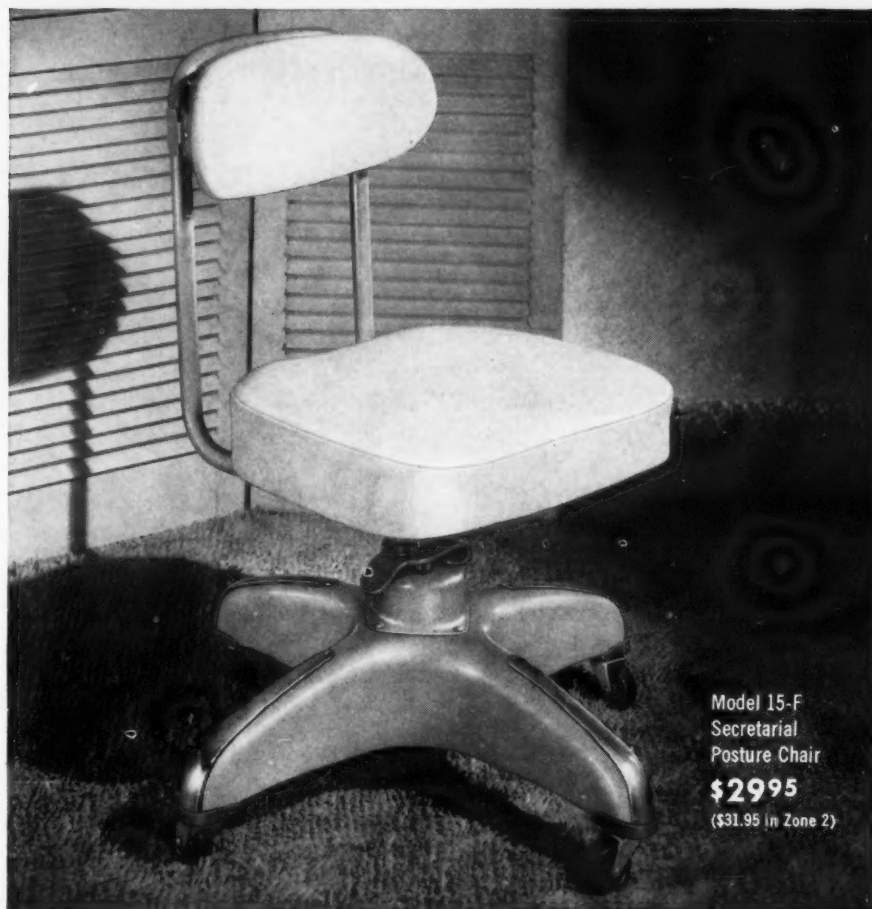
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 too good to miss

Delegation of responsibility

COST AND MANAGEMENT

... The shape of the organization pyramid depends upon the calibre of the executives in the organization. ... The degree of delegation by the chief executive depends

(a) on his own ability and willingness to delegate, and (b) on the calibre of his subordinates and their fitness to accept delegation. ... There are many top executives today who still love to dabble in detail, who will not trust efficient subordinates, who will not leave well alone but who must take a hand in the game beyond the terms of their over-all responsibility. But equally there are subordinate executives who cannot be trusted to make the correct decisions; some even who cannot carry out their administrative functions without constant correction and guidance from their superior; many who cannot co-operate with their colleagues on the same level. Such men in both categories reduce the span of man-management and prevent the achievement of maximum delegation and minimum organization structure.

Bruce A. C. Hills, President, Urwick Currie & Co., Ltd., Montreal, from *Cost and Management*, November, 1956.

Research—a basic necessity



Research is no longer a luxury reserved for a few corporate giants; rather it is a basic necessity for any firm of any size which wishes to survive, let alone grow.

Management gets the kind of performance from its research department which management deserves. Probably the primary ingredient of a successful research program is to give the greatest possible latitude to the most productive and creative people whom it is possible to hire.

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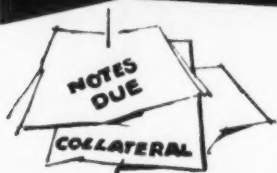
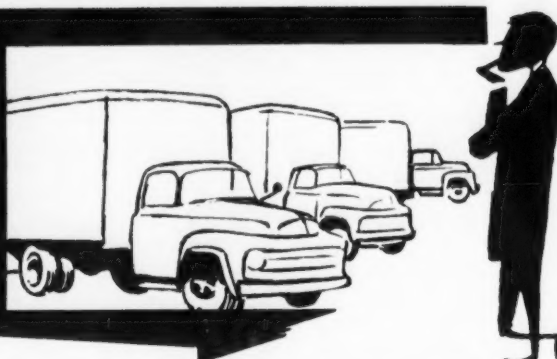
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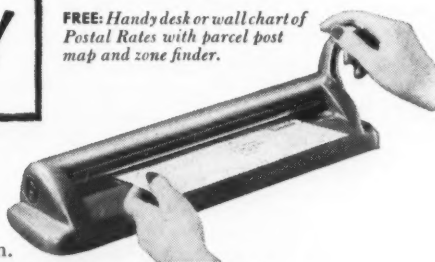


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top administrator is not only feasible but also highly fruitful.
Charles N. Kimball, President, Midwest Research Institute, Kansas City, Mo., from "How Management Looks at Industrial Research."

Qualities needed by a sales engineer



. . . A company must use . . . great care in selecting its sales engineers . . . From my own experience, the most successful sales engineers are those in whom sales aptitudes predominate slightly over engineering curiosity. I have observed that frequently an engineer who is weak in his sales aptitude is prone to spend too much time discussing unnecessary engineering details and not enough time in closing the sale . . .

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1. He should be self-sufficient
2. He must be cooperative
3. He should be self-controlled
4. He should be above average in dominance and aggressiveness

H. E. Beane, vice president, Bristol Co., before the 49th Annual Meeting of the American Institute of Chemical Engineers.

Tight money explained



Money is not tight because the Federal Reserve has made it so, not because there is a shortage of funds. Rather, money is tight because consumers, business and government have stepped up their demand for funds more than the nation's capacity to produce.

What the Federal Reserve has done, and rightly so, is to resist the pressure to interfere in the market, thus permitting the demand for funds to express itself in higher rates of interest. This, in my opinion, is as it should be. By permitting the market to function as a regulator between supply and demand, higher interest rates under existing conditions will tend to dampen the demand for funds on the one hand and on the other to stimulate savings.

Ray D. Murphy, chairman of the board, Equitable Life Assurance Society of the U. S., before a meeting of the National Association of Mutual Savings Banks, New York City, December, 1956.



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tax quiz

RECENT COURT CASES

by Benjamin Newman

Tax Attorney, Koenig and Bachner, New York.

THE QUESTION

Are the bad debts incurred by a partnership's investments in unrelated businesses deductible by the taxpayer as a business debt?

THE FACTS—Taxpayer was a partnership engaged in the retail distribution of beverages. In 1946, because of a beer shortage, taxpayer purchased 90% of the outstanding stock of a brewery. Taxpayer loaned the brewery corporation money so that it could manufacture a beer and ale mixture which the partnership could distribute in its retail stores.

The scheme failed and taxpayer lost approximately \$43,000. Taxpayer deducted the loss as a business bad debt. The Commissioner of Internal Revenue contended that the losses were non-business debts and therefore deductible as a short term capital loss and not as an ordinary loss.

THE RULING—In upholding the commissioner's determination, the Tax Court ruled that taxpayer was not in the business of financing, managing, or making loans. The advances to the brewery corporation, observed the court, were not part of taxpayer's cost of purchasing the beer and ale mixture since it was not necessary for taxpayer to make the advances to the corporation in order to obtain the product.

Accordingly, taxpayer may not deduct the loss as an operating loss. Taxpayer may, however, deduct the loss as a non-business bad debt. (*Koppelman vs. Commissioner of Internal Revenue*, U. S. Tax Court, decided November 29, 1956)

THE QUESTION

Is the distribution of corporate property a nontaxable partial liquidation, or is it a taxable dividend?

THE FACTS—A corporation engaged in the business of making paper products also owned mining property which it had leased on a royalty basis. The lease granted the lessee exclusive right to mine the property and provided for payment of royalties based upon the amount of ore extracted under the terms of the lease. The corporation was not required to engage in any business activity in connection with the property, and actually was not involved in any activity connected with the property.

The stock of the lessor corporation was owned by two other corporations in which each held a 50% interest. The corporation had pro-

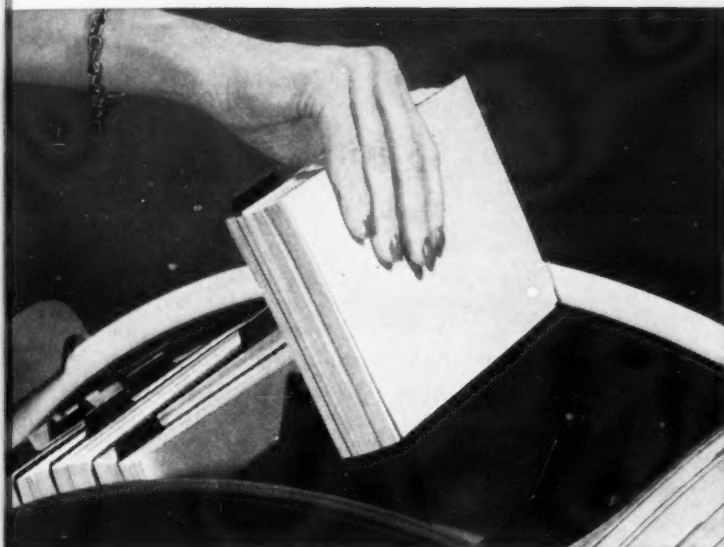
posed distributing to its two stockholders the fee title to the mining property, subject to the mining lease. Taxpayer corporation contended that such a distribution was a partial liquidation of its assets and thus, contended the corporation, the transaction should not be considered subject to tax.

THE RULING—The Bureau of Internal Revenue held that it was obvious that the corporation had not been engaged in any business activity in connection with the mineral property. Ownership, per se, of the property does not constitute a trade of business. Therefore, the availability of the prop-

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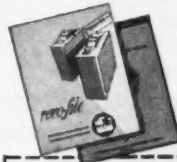
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erty for distribution to stockholders did not result from the termination or liquidation of a trade or business by the corporation.

Accordingly, it was held that the amount of the property distribution should be included in the gross income of the corporate shareholders to the extent that the distribution is a dividend within the purview of the Internal Revenue Code. (Rev. Ruling 56-512, October, 1956.)

THE QUESTION

Is the money received on a fire insurance policy on involuntarily converted property (incurred by fire or condemnation) subject to tax?

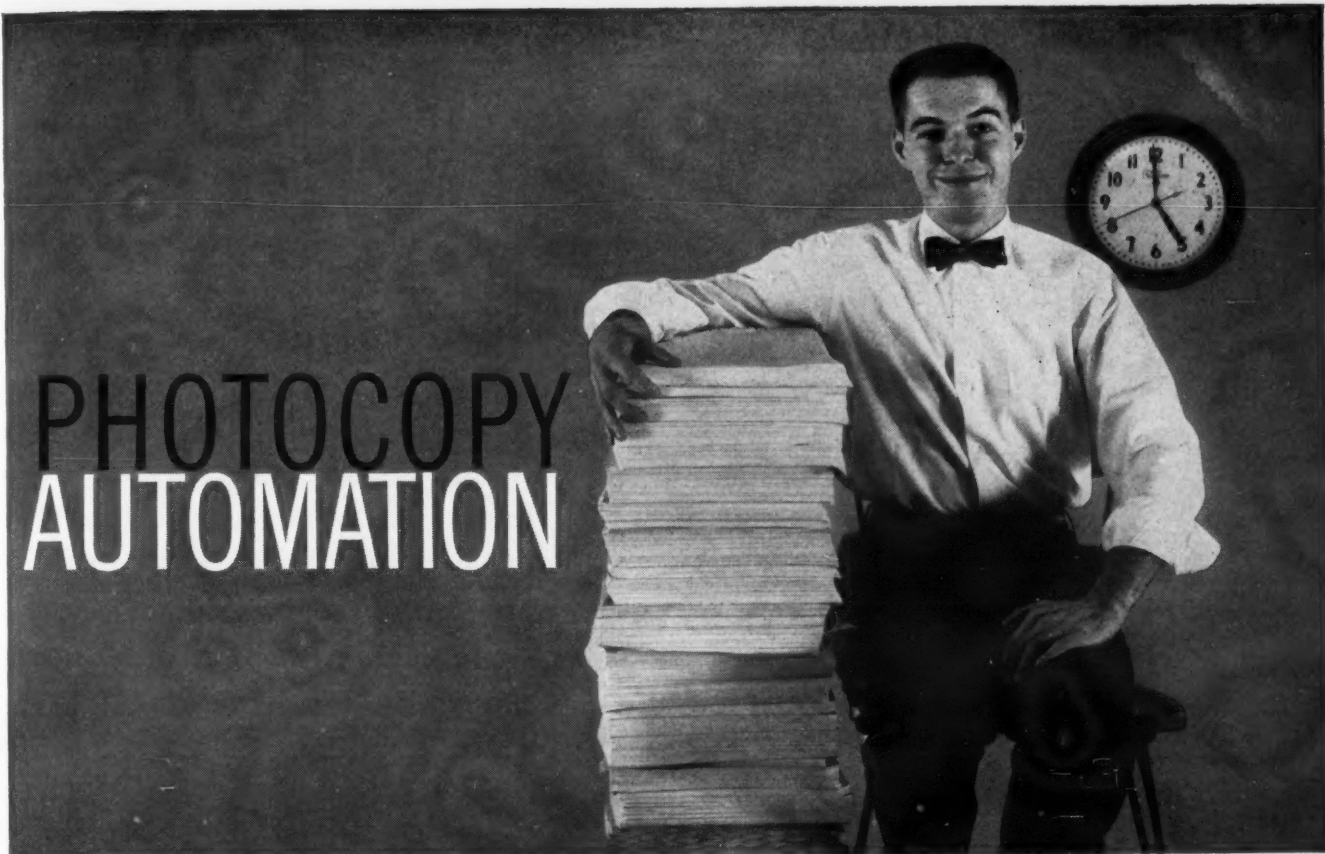
THE FACTS—Rental property owned by a taxpayer was destroyed by a fire in 1953. Taxpayer was insured and recovered the face amount of the policy. By December 31, 1954 taxpayer had not yet replaced the destroyed property and requested an extension of time in which to do so. The extension was granted to December 31, 1955, in which period taxpayer retained a contractor to construct similar property. Taxpayer did not insist that the construction be completed in 1955 and, due to various complications, the rebuilding job was not completed before the expiration of the extended deadline.

THE RULING—The Internal Revenue Code provides that if a taxpayer replaces involuntarily converted property within a time specified in the code, he may at his election defer the recognition of any gain to the extent the amount realized upon conversion equals the cost of the replacement property.

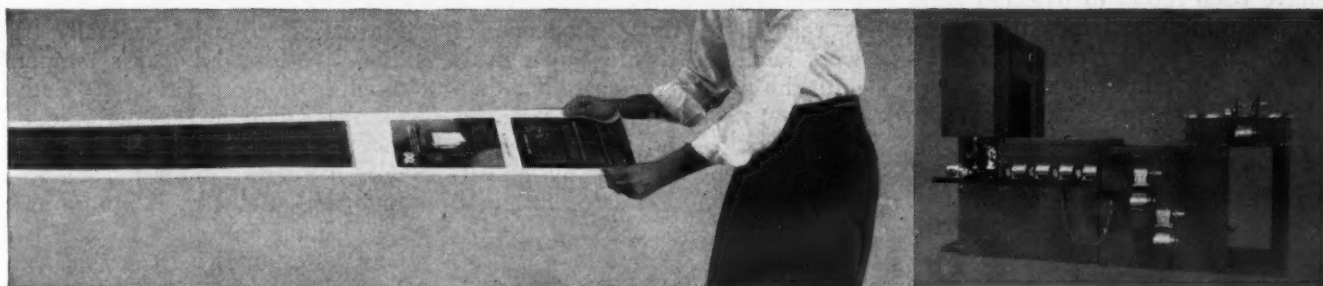
The terms of the code are very explicit and are strictly construed. A contract with a builder to construct replacement property does not fulfill the requirements of the code. The replacement must actually exist prior to the expiration of the period.

Accordingly, taxpayer must pay tax on the insurance proceeds to the extent it exceeds the adjusted basis (cost less depreciation) of the property destroyed. (Revenue Ruling 56-543, October, 1956.)

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How to sell the sizzle



Every age has its hero and the hero in today's age of expanding American technology is the engineer. Devious methods have been found to pay him homage. Business and industrial firms, desperate for his services, are intensifying their campaigns to lure him into their organizations and to keep him happy once there so he will stay productive—and stay put.

A look at the classified section of the Sunday newspaper reveals the multitude of recruiting appeals being used.* The only appeal that seems destined for ultimate failure is the one based on unfounded promises of pie in the sky. Most firms, however, have learned to avoid this kind of press agency, instead offer the engineer sincerely positive advantages. Some organizations, for example, emphasize the adventurous aspects of their advanced projects; others the opportunities available for advancement. Some companies play up the professional reputation of their present engineering personnel; others emphasize the excellence of their work facilities.

These and other appeals have

been used for years by engineer-starved companies with varying degrees of success. Now, however, a new kind of engineer recruiting approach has come to the fore. It is related to the "excellence of work facilities" theme, but it deals with the plant location rather than the plant itself. Further, it is aimed at stimulating and holding the job interest of the engineer by appealing to his non-job-related interests.

Site appeal

An example of this approach is a display ad of Boeing Aircraft that has been dominating classified pages of newspapers around the country recently. The ad shows a relaxed and contented engineer, not on the job, but off the job, enjoying a beautiful Saturday afternoon of sailing with his wife. The text points out that such is the pleasant existence awaiting the engineer who moves to Seattle to work for Boeing.

Another example is a Minneapolis-Honeywell ad inviting engineers to Minneapolis with the headline, "Challenging engineering work near outdoor fun!" followed by a picture of a man skiing with his family. General Electric recently called attention to its Pittsfield,

Mass., plant with an ad headlined, "Engineers who are 'homesick' for the country . . ."

Engineers, of course, cannot be typed or classified as a whole, but it does seem to be generally true that a technical person's temperament is outdoor oriented. Rather than a nightclub hopper, the engineer "type" is more often than not, it seems, interested in free-time activities like hunting, boating, fishing and golf—as well as a lazy afternoon in the backyard hammock. For this reason, companies from Maine to Ohio to California, and from Washington to Arkansas to Florida have begun to hark the merits of their plant sites to engineers and other needed workers. Again, varying degrees of success have been experienced, due largely to the facts that 1) some locations are generally more appealing to employees than are others, and 2) some companies do a better job than others in calling attention to their location plus factors.

Here, however, is an actual case example that provides unquestionable evidence that it pays to sell the sizzle of your plant site. It also offers an unusually thorough program of pre-selling current em-

*Advertising agencies are now in existence which specialize almost completely in classified and display advertising for engineers.

e of your site

Some firms in the forefront of the engineering shortage are learning to apply a new recruiting method: "Sell the location plus the job." Here is the story of how Minneapolis-Honeywell selected a new plant site primarily on the basis of the site's appeal to employees, how the company has stimulated real excitement among the engineers and technical employees who are to be transferred there, and how it uses the appeal of its new location in recruiting more engineers.



employees on a new plant site before transferring them there.

M-H goes to Florida

Early last year a team of officials from the Aeronautical Division of Minneapolis-Honeywell Regulator Co. went plant site hunting. They were looking for the best spot to build a new engineering facility for design and prototype production of inertial guidance systems.

In the course of a period of months, they conducted thorough investigations of 21 areas. Finally, in May, a decision was reached; the choice was a 95-acre plot on the outskirts of St. Petersburg, a peninsular city halfway down Florida's west coast. Once known only as a haven for retired folk, St. Petersburg in recent years has experienced a booming influx of businesses, mostly light manufacturing, electronics and service-type firms.

Construction of M-H's St. Petersburg plant was begun in January. The initial construction will be a 90 thousand square foot administration, engineering and design building, plus a 14,400 square foot test shop and prototype plant. Plans have been made for a possible expansion to about 210,000 square feet in the next few years.

Operations are scheduled to begin in December. Management, engineering, and key technical and supervisory personnel are being transferred to the new site from the M-H Aeronautical Division in Minneapolis. Other engineers and skilled workers to fill some 600 immediate jobs are being recruited outside of the company, both locally and from other areas.

Why did Minneapolis-Honeywell select St. Petersburg as the site for its new plant?

One unusual reason is that *Polaris*—The North Star—is reportedly visible there for more hours of the year than in most other American cities, and The North Star is used in setting the inertial guidance systems to be manufactured.

But this astronomical consideration was of minor importance compared to the strength of Florida's appeal from the employment point of view. With big expansion plans on the boards, Minneapolis-Honeywell wanted to be absolutely certain that it could count on an adequate supply of labor of all types—particularly scarce engineers.

No engineer shortage

The experience of other firms which have preceded Minneapolis-

Honeywell to Florida weighed heavily in the company's decision. For example, M-H officials learned that since 1953, when Chemstrand Corp. opened its plant in Pensacola, it has been deluged by 100,000 applications for 4,500 jobs. Fairchild Engine Co. placed an ad offering 200 employment openings at its St. Augustine plant, received 3,000 replies.

And the trend continues: when General Electric announced its new Florida operation recently, a post office box number buried deep in a news release produced 17,000 responses from 34 states, Canada and three foreign countries in three weeks. Despite the fact that the St. Petersburg Chamber of Commerce has no employment service, it received 97,000 letters during 1956 from people in all parts of the country seeking Florida jobs.

Minneapolis-Honeywell at present has about six applications for every job it will have immediately available, including a significant number from top qualified people anxious to come to Florida for lesser jobs than they now have.

"Selling" your site

In the face of such a rich labor supply and what is widely consid-

ered to be the natural appeal of Florida from the employee point of view; it might seem strange for Minneapolis-Honeywell to conduct a program of actually "selling" people on the advantage of Florida employment. Nonetheless, an aggressive selling campaign has been conducted on a broad scale.

M-H has directed perhaps the largest part of its efforts to people already on its payroll—the key people in Minneapolis who are being transferred to St. Petersburg. These employees, who will serve as the nucleus of the new operation, have been selected, not on the basis of their desire to move to Florida, but on the basis of what they can contribute to the company there.

Thus, reasoned management, the company had a responsibility to inform these people of what they could expect in their new location. And since transfer was not compulsory, M-H wanted to sell the people on the move so that they would agree to go, and, if possible, become enthusiastic about it.

"After all," says one company official, "we're asking these men and their families to pull up stakes, sell their homes, leave their friends and community interests, and move into a completely different climate."

Wickham Skinner, who is already in Florida as director of administration for the new operation, points out: "When we informed the key people that they had been selected for transfer to St. Petersburg, we knew that the wave of general attitude would go either strongly in favor or strongly against. Our job was to present them with the facts in an effort to keep the response favorable."

Selling methods used

Here, specifically, is what was done.

Published facts: Soon after the decision was made to build in Florida, but before it was made known, a group of M-H public relations and personnel people quietly went to work gathering facts about living conditions at the new site. Information pipelines were set up with the St. Petersburg Chamber of Commerce, as well as local utilities, which funnelled in all kinds of factual and illustrative material.

From this mass of data, the most

significant items were distilled out, dressed up and put together in a large, colorful 30-page booklet, heavily sprinkled with illustrations, including pictures of glistening beaches decorated with bathing beauties.

Due to pre-planning and speedy work, this booklet was available shortly after the official announcement of the new Florida operation. A copy was handed to each of the people in Minneapolis who had been selected for transfer.

The booklet was titled, "Location: Florida," and it was not simply a "once-over-lightly" treatment. Rather, it presented specific and detailed facts and figures covering every major phase of the Florida environment that would be of interest to the people who were to be moved. In many cases, comparative figures were given for St. Petersburg and Minneapolis—including some which favored Minneapolis. Despite the fact that the book was designed for the sole purpose of selling M-H people on the move, it contained only objective facts, and left it for the employee to decide whether the move would be favorable for him.

The booklet started off with a concise description of the new plant, followed by facts about the city of St. Petersburg and the surrounding area.

Housing was given special attention. Photos and floor plans showed what was available in various price ranges. The company had even gone to the extent of sending to Florida home builders,

floor plans of houses being built in Minneapolis, asking for quotes on Florida construction costs; the comparative prices for similar houses in Minneapolis and St. Petersburg were then included in the book. Home financing was also discussed.

Facts and figures about the cost of living in St. Petersburg were included, together with facts on school facilities, taxes, hospitals, cultural activities and recreational facilities, with a special section devoted to Florida fishing.

No cost was spared in preparing this book; reportedly, art work and printing alone amounted to about \$11 per copy.

Special meetings: The booklet, however, was only the first step in Minneapolis-Honeywell's site selling program. The next step consisted of two special meetings to which were invited all of the people who were to be transferred, together with their families.

The first meeting was held in August, a month after the announcement of the new plant. On hand were four speakers: a representative of the Florida Power Co., who told the Minneapolis-Honeywell people what preparations the people of St. Petersburg were making for their arrival; Minneapolis-Honeywell's own district sales manager in Florida, who discussed living conditions and family life in the location; a leading St. Petersburg real estate man, who discussed housing; and the wife of the president of St. Petersburg Jun-

(continued on page 86)

PLANT SITE FACTS

Most Chambers of Commerce and industrial development groups have published material available that can be used to sell your employees or potential employees on the benefits of living in a particular plant location. For example, the facts booklet described in this article, prepared by Minneapolis-Honeywell for its employees who were to be transferred from Minneapolis to St. Petersburg, Fla., was based in part on material contained in the 1956 "Economic and Statistical Review," published by the St. Petersburg Chamber of Commerce. For a free copy of this review, circle number 725 on the Reader Service Card. Further, if you would like plant site information covering any other city or general area of the country, simply address a letter to MM's editor.

You can use Operations Research without a slide rule

Behind every decision you make for your company, there lies a basic objective: to get optimum return from the expenditure of your company's resources—human resources, equipment, capital and other resources.

For example, when a sales manager assigns his men to territories, his goal is to get the best possible result—sales—by matching individual abilities with specific problems or conditions. The same applies for a production manager when he decides which machines will be used to make which products. And the same holds for the top manager who must decide how he can most profitably apply the earnings retained in his business.

Sometimes, when only a few choices are available, such decisions are simple. But when there are a number of individual resources to be applied to a number of needs, the possible arrangements multiply. Then the decision becomes complex, quickly reaching beyond the scope of a man's ability to mentally determine the optimum arrangement.



ABOUT THE AUTHOR

A member of the Operations Research Group of Ohio State University, Ram Vaswani was born in India and took a Mechanical Engineering degree from the University of Bombay. Later he worked with private companies and the Indian government before coming to this country. In 1954, he took an M.S. degree in Industrial Engineering, and is presently a candidate for a Doctor of Engineering Science degree.

To the man who makes the best decisions goes the competitive advantage. With Operations Research you can find optimum solutions to problems facing your company. Here is a complex OR theorem that has been reduced to non-mathematical proportions. It's called the assignment technique. To use it, you need only add and subtract. When you read this article, think of all the ways you can use this method in your own job now.

by Ram Vaswani

Operations Research Group, Engineering Experiment
Station, The Ohio State University

In time past, an executive faced with such complex, multi-choice decisions, was forced to rely on "hunch" or trial-and-error. Now, however, there is a better way, made possible by linear programming, a tool of operations research.

One type of linear programming that applies here is called the assignment technique. The mathematical theory that supports the assignment technique is a little complicated and has been covered elsewhere (see references 1 or 2 at the end of this article). The actual application of the assignment technique, however, is relatively simple: it can be used as a decision-making tool by an executive with a small amount of training.

Following is a quick review of the assignment technique, plus the solution to an actual problem that, with a little patience, the reader can follow through step-by-step.

What is the assignment problem?

Suppose an airline has five airplanes available at a certain air base to allocate to five separate flights. Each plane is capable of

flying any one of the five flights. The revenue for each flight is fixed no matter what the assignment of planes to flights. However, some planes are small and others large, some old and others new. Hence, the cost associated with allocating each of the five planes to the same flight is different. The problem of the airline is to make the assignment in such a way that each plane is allocated to a single flight and the sum of costs is minimized.

Notice that even though one plane might be cheapest for all five of the flights, it can be used for only one. To illustrate, suppose that in Table I (next page), horizontal rows represent the five planes; vertical columns, the five flights; and the squares at the intersections of rows and columns represent cost of each plane making each flight. It is clear that plane No. 4 would be cheapest to operate on all the flights. Which one of these flights should be allocated to this particular plane, and how should the remaining four planes be assigned to the remaining flights?

This is an example of the assignment problem. Similar applications

TABLE 1
Cost or Rating Matrix

FLIGHT NO. ► AIRCRAFT NO.	1	2	3	4	5
1	300	500	320	436	502
2	500	350	635	540	320
3	310	535	250	370	195
4	250	180	110	270	190
5	560	370	250	345	460
MINIMUM IN COLUMN	250	180	110	270	190

TABLE 2

FLIGHT NO. ► AIRCRAFT NO.	1	2	3	4	5	MINIMUM IN ROW
1	50	320	210	166	312	50
2	250	170	525	270	130	130
3	60	355	140	100	5	5
4	0	0	0	0	0	0
5	310	190	140	75	270	75

TABLE 3

FLIGHT NO. ► AIRCRAFT NO.	1	2	3	4	5
1	0	270	160	116	262
2	120	40	395	140	0
3	55	350	135	95	0
4	0	0	0	0	0
5	235	115	65	0	195

arise in business and industry every day.

Why was the assignment technique developed and what are its advantages?

The technique was developed because the simple enumeration method (listing and costing all the possible assignments and selecting the best assignment) would simply not work even for problems of moderate size. For example, take a case involving the assignment of three jobs. The number of possible assignments is six. With four jobs to be performed the number of possible assignments is 24. The following figures show the number of possible arrangements for jobs up to 10:

NO. OF JOBS TO BE PERFORMED	NO. OF POSSIBLE ASSIGNMENTS
2	2
3	6
4	24
5	120
6	720
7	5,040
8	40,320
9	362,880
10	3,628,800

Notice how fast the number of possible assignments increases with the number of jobs to be performed. Now consider a case involving 20 jobs. There can be

2,432,902,008,176,640,000 possible assignments. This problem would take a fast electronic com-

puter programming and costing one arrangement per microsecond and working eight hours a day, 365 days a year, well over a half a million years to select the minimum cost assignment—an impossible situation. Hence other methods have to be used. The disadvantages of the trial-and-error approach are that it takes time, and there is no way of knowing if the best assignment has been selected or how close any particular assignment is to the best assignment.

The connection between linear programming and the assignment problem was first pointed out in 1953 by Prof. Merrill M. Flood, Associate Director, Engineering Research Institute, Willow Run Laboratory, University of Michigan. Flood showed that linear programming techniques could be used for solving the assignment problem.

In 1955, using a theorem which had been proved in 1916 by a Hungarian mathematician, D. Konig by name, Prof. Flood developed a simple and direct technique for solving the assignment problem. Since Flood's technique assumes only the knowledge of simple arithmetic—specifically the ability to perform addition and subtraction—it can be used by almost anyone.

What basic information is required for the application of the assignment technique?

First, you must list facilities to assign and jobs to be performed.

Second, you must specify the

criterion, such as cost, revenue, profit, output, time, distance traveled, etc., in terms of which the assignments are to be evaluated, costed or rated.

Third, you must determine or estimate the *rate* (in terms of the units in which the criterion is to be expressed, e.g., dollars, hours, miles traveled) associated with assigning each facility to each job. This information can be put into a table which the mathematicians call a *cost or rating matrix* (see Table I).

How does Flood's assignment technique work?

The technique essentially consists of nine steps. We will use our airline problem in following through these steps.

First, let's see how well you do without using any technique. Examine Table I and write down which planes you think should be assigned to which flights. Because this is a fairly simple problem, you may be able to come fairly close to the best answer.

Now, in order to actually determine the minimum cost assignment by means of Flood's technique, we do this:

Step 1. Examine *individually* each vertical column of Table I for the minimum number and write this number in the row so labeled at the bottom of the Table. Thus, the minimum number in column 1 is 250, that in column 2 is 180, etc.

Step 2. Subtract from *each number* of Table I the *minimum num-*

TABLE 4

FLIGHT NO. ► AIRCRAFT NO.	1	2	3	4	5
1	50	230	120	76	262
2	120	0	355	100	0
3	55	310	95	55	0
4	40	0	0	0	40
5	275	115	65	0	235

TABLE 5

Minimum and Maximum Cost Assignments

Maximum-Cost Assignment			Maximum-Cost Assignment		
(1) AIRCRAFT NO.	(2) FLIGHT NO.	(3) \$ COST	(4) AIRCRAFT NO.	(5) FLIGHT NO.	(6) \$ COST
1	1	300	1	5	502
2	2	350	2	3	635
3	5	195	3	2	535
4	3	110	4	4	270
5	4	345	5	1	560
COST OF WHOLE ASSIGNMENT		1,300			2,502

ber in its column and write the new numbers in their appropriate squares in Table II. To illustrate, subtract 250 (the minimum number in column 1 of Table I) from 300, the element in the square in row 1 and column 1, and write the result, 50, in the square at the intersection of row 1 and column 1 in Table II. Similarly, subtract 250 from 500, the number in the square in row 2 and column 1 in Table I and write the result, 250, in its appropriate square in Table II. Continue this until all squares in Table II are filled. Note: Table II must have *positive* numbers or zeros only; negative numbers must not appear.

Step 3. Examine *separately* each horizontal row of Table II for the minimum number (which will be either zero or a positive number) and write this in the column so labeled in Table II. In our case, row 1 has the minimum number 50, row 2 has 130, row 3 has 5, row 4 has 0, and row 5 has 75.

Step 4. Subtract from *each number* of Table II the *minimum number in its row* and write the result in the appropriate square in Table III. This table will have at least one zero in each column and each row.

Step 5. Examine all zeros in Table III and start shading rows and columns in such a way that *all zeros* lie in the shaded rows and/or columns, and the *number of such rows and columns is minimum*. Thus, in Table III, we could shade columns

1, 2, 3, 4, and 5 and thereby include all zeros in five shaded lines (*a row or a column is designated as a line*). However, since our objective is to shade the minimum number of lines, we are better off shading rows 4 and 5, and columns 1 and 5, thus making a total of only four lines. Alternatively, we could have shaded row 4 and columns 1, 4, and 5, again making a total of four lines. Either of these two alternatives, with the minimum number of shaded lines, will do for the problem.

When shading lines, it is best to *shade columns in one direction and rows in another direction* so that squares at intersections of shaded rows and columns have double shading for the reason stated in Step 7.

Step 6. If the number of shaded lines equals the number of rows we started with in Table I, proceed to Step 9, otherwise to Step 7.

Step 7. If the number of shaded lines in Table III is less than the number of rows in Table I, examine the unshaded squares in Table III and find the minimum number—in this case, 40.

A. Now, *subtract 40* from each number in the unshaded squares of Table III and write the result in the corresponding squares in Table IV.

B. Also, *add 40* to each number in the square (if any) with double shading and write the result in the corresponding square in Table IV.

C. Numbers in the squares with single shading in Table III should be transferred to their corresponding squares in Table IV *without any addition or subtraction*.

Note that in our example there are nine unshaded squares in Table III. So, we subtract 40 from each of these and write the result in Table IV. Also there are four squares with double shading; therefore, we add 40 to each number in each of these four squares and write the result in Table IV. And, there are 12 squares which have a single shading. Hence, we simply transfer numbers from these squares to their corresponding squares in Table IV.

Step 8. Now use line shading Step 5 on Table IV and follow instructions in Step 6 (*i.e.*, proceed to Step 9 if the number of shaded lines in Table IV is five, otherwise to Step 7). This is to be repeated as many times as necessary and new tables constructed until the minimum number of shaded lines determined in Step 5 becomes equal to the number of rows we started with in Table I.

In our example, the minimum number of shaded lines that can be fitted in Table IV, according to Step 5, is five. In Table IV, row 4 and columns 1, 2, 4, and 5, have been shaded, although many other alternatives for shading the lines exist; however, none of these alternatives has less than five lines.

(Continued on page 87)

You can't ignore the coffee break



can't ignore the river of coffee flowing into the nation's work places—factories, offices and stores. It has nearly doubled in size during the past six years.

Once the coffee break was a rare privilege, or a furtive flee to the corner drug store; now it looms as a national institution. And for the firm fighting to get and hold scarce manpower, it ranks as a force to be reckoned with.

"Across the street at XYZ Co.," reports Jane to Mary testily as they powder their noses, "they serve coffee to the girls in the morning and afternoon," and before the week is out both are on XYZ's payroll.

There are arguments on both sides concerning the therapeutic or physiological benefits of the coffee break. But it is indisputable that employees consume a good deal of unproductive time while joyfully consuming their coffee—especially since there is a tendency for workers to abuse and extend the "rest period" aspects of the coffee break.

Despite these facts, the trend is clear: increasing numbers of employers are conceding that they can't break the coffee break, and have given up trying. Instead, they are facing the reality that on-the-job coffee is here to stay and are making the most of it—partly by raising a cup or two each day themselves.

Your coffee break practices now influence your competitive position in the labor market. Measure your policy against these national survey findings.

Two questions to answer

For the businessman who must contend with the problem, there are two questions to be answered:

- What should be my company's coffee break policy if we are to stay competitive in the personnel market?
- How can we minimize the time costs involved in permitting workers the coffee break?

The answer to the first question lies in the findings of a survey recently conducted for its members by the Pan-American Coffee Bureau (certainly no disinterested party). Some of these findings are reported below. The second question is being answered now in the response to a survey underway by MANAGEMENT METHODS; the findings will be reported in a future issue.

The remainder of this article consists of findings from Pan-American's survey report, made available to MANAGEMENT METHODS on an exclusive basis:

Coffee in the factory

A comparison was made of the proportion of workers in factories, offices and stores who do or do not have an official rest period with coffee available. The comparison shows that slightly more than one-half the factory workers reported an official break, whereas less than one-quarter of store workers had any official breaks. This is shown

on the top segment of the chart, giving distribution by length of the break.

These figures show factory workers have more breaks and that they are more often of 10 minutes duration than for other worker groups. Fifteen minutes is the more common length of an official break for office or store workers. The majority of the workers who have rest periods have them for both morning and afternoon (or the equivalent on night shifts). This is shown on the bottom segment of the chart, in which the number of breaks in the working day appears.

Coffee available to 73%

In addition to the inquiries about official rest periods with coffee, workers were asked to state specifically at what time or times during the day they *could* get coffee. Almost half, 48%, said all day. The differences by type of worker, and the other occasions when coffee is available, were:

Coffee Available	Factory	Office	Store	Total
All day	36%	45%	63%	48%
Rest periods only	31	24	12	22
Some specific time other than official rest period	3	4	1	3
Total	70	73	76	73
Meal time only	9	6	4	6
No coffee available	21	21	20	21
Total	100	100	100	100

MANAGEMENT METHODS

Morning and/or afternoon?

Among the 2,429 people interviewed working in factories, stores and offices, an adjusted 21% reported having coffee at their place of work during the morning. Another 13% drank their coffee at an eating place in the morning on working days. Thus, a total of 34% of workers actually enjoyed a coffee break during the morning. These workers are slightly less than half (46%) of all the workers who reported an opportunity for a coffee break which was shown above to be 73% of the 2,429 workers.

An afternoon coffee break was taken by 10% of workers in their place of work and another 8% in eating places. Since official rest periods as a means of obtaining a coffee break are less frequent in the afternoon than in the morning, it follows that the frequency of the afternoon break would be lower than for the morning.

During the morning, 25% of the workers who enjoyed a coffee break did so with two cups at one break or took two morning breaks. The comparable proportion for afternoon breaks was 22%.

These figures are based upon the fact that the worker drank coffee on the job or at an eating place during working hours regardless of how long the break or whether it was a regular rest period or not. An employee who took two minutes to get a cup of coffee at a vending machine and brought the cup back to his desk, and the one who went to the restaurant on the ground floor of his building are both counted as taking a break.

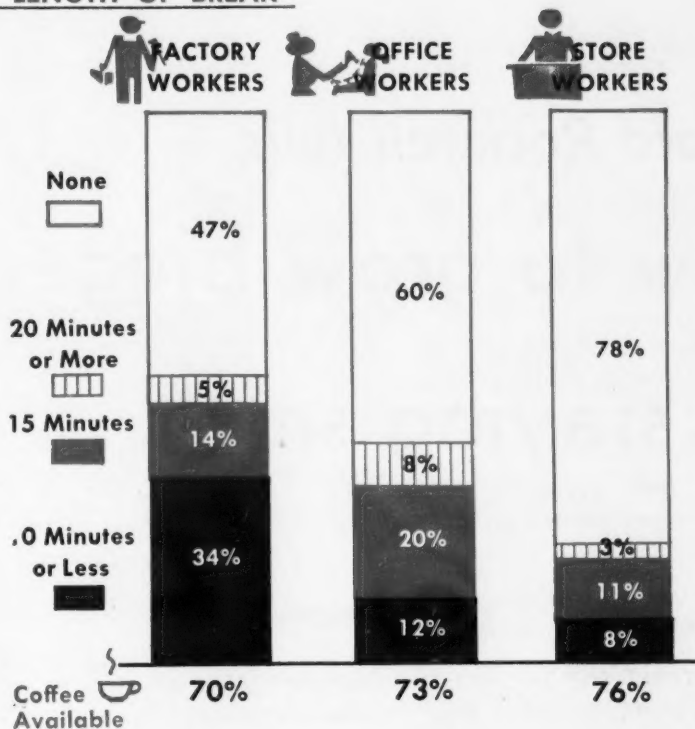
The figures above do not separate out those workers who enjoyed both a morning and afternoon coffee break. This is shown in the following table.

	Factory Store and Office Workers
Morning break only	23%
Both morning and afternoon break	11
Afternoon break only	7
Total Taking any Break	41

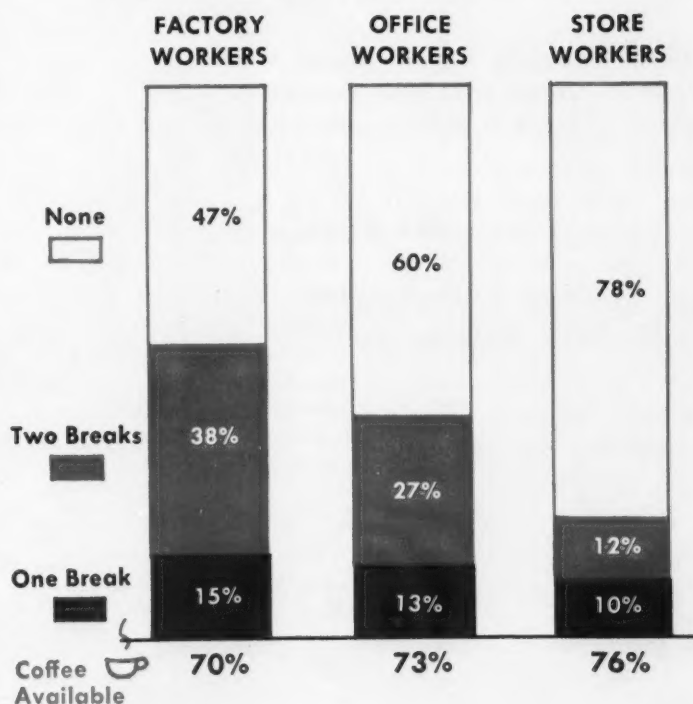
These figures include some workers on night shifts or irregular hours whose first work period before a meal break is the equivalent of the much more common morning work period. m/m

OFFICIAL REST PERIODS.

LENGTH OF BREAK



NUMBER OF BREAKS



PROFILE OF A NEW KIND OF MANAGER

Willard Rockwell tells— How to grow bigger by staying small

THE PROBLEM:

How to avoid the bigness of "big business" while expanding facilities, markets, sales and profitability through a vast program of diversification, plant acquisition and modernization.

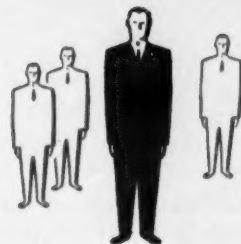
THE ANSWER:

Stick to small towns and keep plants small; emphasize "community attitude" in site selection; finance new plants with methods beneficial to both company and community.

THE MAN:

Willard F. Rockwell, Jr., President
Rockwell Manufacturing Co., Pittsburgh

PHOTOGRAPHS BY LAURENCE LUSTIG



What you will find in this article

- How Rockwell has financed a 40% plant expansion in five years
- How to get a new plant with no capital outlay
- Why Rockwell uses stock to finance acquisitions
- How Rockwell benefits by refusing a stock exchange listing
- Who controls Rockwell
- Why Rockwell keeps its plants small
- How Rockwell selects its plant sites and why it favors small towns
- Why it's bad business to accept a tax holiday
- How Rockwell coordinates its diverse and decentralized operations
- How "the boss's son" overcomes his stigma



A case history

Rockwell Manufacturing Co. is a diversifying industrial paradox that keeps growing bigger by keeping all of its operations small.

Last month Willard F. (Al) Rockwell, Jr., 43, completed his first 10 years as president of this miniature giant. During these 10 years, the company has fared exceedingly well (*see chart below*).

The company's growth cannot be credited solely to young Al Rockwell. For example, Col. Willard F. Rockwell, Sr., who started the company on its way 30 years ago, continues as board chairman. But a close look makes it unmistakably clear that the management reins are now firmly held by The Colonel's big, good-looking, self-confident son.

A biblical lesson

From the very beginning, Rockwell Manufacturing has followed the example of the biblical father who showed his sons that it is easier to break one heavy stick than a number of twigs bound together. The company's chief operating philosophy through the years has been to both acquire and construct a network of small plants, operate these on the basis of an "optimum maximum" size of 500 employees, and lace them together into a strong and flexible unity.

Rockwell's reasons for keeping its plants small are many. And its success with its small plant policy demonstrates that often the smaller company can use its size to gain an advantage over its larger competitors.

Rockwell diversification

Rockwell is diversified two ways: geographically and by product. Its 21 plants are located in 14 states from New York to California, with one in Canada. It also has 15 foreign licensees making

its products, and has sales representatives in 80 foreign countries.

To its 17,000 customers Rockwell sells three major categories of products, each accounting for about a third of the sales dollar:

Control devices, such as Nordstrom valves, Edward valves, service cocks and valve lubricants. These are sold to growth industries such as natural gas, petroleum, chemicals, and electric power generating firms. The field of atomic power provides a future outlet for these products.

Measuring and regulating devices of all kinds, including gas meters, water meters, industrial meters, taximeters, parking meters, regulators, chart clocks, and so on. Among the significant customers here are town and city governments, as well as utilities.

Power tools, including the Delta and Walker-Turner industrial power tools, Delta Homecraft tools, Beaver power tools and a full line of motors and accessories. Industrial, school and consumer markets are sold.

How do they do it?

How does Rockwell Manufacturing Co. manage its sprawling network of small enterprises and why doesn't it consolidate them? How does the company maintain balance in its operations? How does it maintain its favorable competitive position? How has it managed to finance a 40% expansion of plant facilities in five years?

To get the answers to these and other questions, MANAGEMENT METHODS conducted a series of tape recorded interviews at Rockwell headquarters in Pittsburgh. Following are the most revealing highlights of MANAGEMENT METHODS's interviews with President Rockwell, plus comments of other members of the company's top management.

Sales are up 83% to \$114 million last year (in 1956 alone, sales increased 38% over the preceding year). Profits have risen even faster.

Ten plants in 1947 have become 21 today.

Product lines have also doubled (to 18 lines, 125 individual products, 25,000 variations).

Rockwell is now in 29 different markets, compared to a dozen 10 years ago.

Shareholders have increased from 3,260 in 1947 to over 12,000 today, despite the fact that it has remained, purposely, unlisted.



Q. Mr. Rockwell, five years ago you began an expansion program that will increase your plant floor space by 40% by the middle of this year. You have acquired a number of companies, modernized some of your existing plants and have been building modern plants in half a dozen small towns across the country. How can a company of your size manage to finance expansion of this kind?



A. Some of our construction and some of our acquisitions have been financed with our own cash—sometimes by borrowing, although we are not very much in debt these days. In fact, we had no debt at all a few months back.

Q. Do you also use stock to finance your expansion?

A. We have often acquired other companies in exchange for stock. But we don't use stock to raise the capital for the new plants we have been putting up.

Q. Do you mean all your new plants are financed through retained earnings or borrowed capital?

A. No, in the majority of recent instances we have financed new plants with the assistance of community development groups.

Q. State industrial development commissions?

A. No, I'm referring strictly to local groups. A group of people in a town will get together and form an industrial development foundation or corporation. You will find them all over the country in towns seeking industry. Business people and other local citizens become mem-

bers of the group by investing some percentage of the capital needed to build a new plant, then they finance the remainder through a mortgage. They put up the plant, usually to a company's specifications, and they own it. They regain their investment, with interest, through rent paid by the company over a period of years. Usually the firm moving into the plant signs a long term lease, with options to renew the lease for additional periods at reduced rentals. The original leasing agreement may run for any number of years, from 10 on up to perhaps 50. The development corporations are tax free, but members pay taxes, of course, on the interest they receive on their investments, just as they do on any other interest income. We have five plants financed in this way.

Q. And these plants are where?

A. Well, we have them in just about every section of the country. There's one down in the South; we have one in the Southwest and another on the West Coast; there is another one of these plants back in the East; finally, we have a midwestern plant that was financed using the community fi-

nance method. Incidentally, we have also used this method for some plant additions.

Q. Your wide use of this financing method indicates that you have found it satisfactory.

A. Yes, we have found it very satisfactory from a number of points of view. Actually, though, it's not so much a question of finance as it is a question of gaining community participation. One of our plant additions, for example, indicates that. There wasn't much of a capital investment involved, but we think it's healthy to have the people of the community participate. If the people of a town are willing to invest their money in your plant, you can be pretty sure that they want you there and that they will continue to take a favorable view toward you—provided you live up to all your community responsibilities. It becomes a two-way vested interest, which under ordinary circumstances is good.

Incidentally, this community method of financing plants is not new; some years ago it was far more common than it is now.

Q. Do you feel that this method of financing your expansion will be suitable for your continued growth in the future?

A. It will be, yes. On the other hand, here at Rockwell we feel that it is important to maintain a balance between the physical assets we own and those we rent from community development foundations. If you are involved in too many of these leasing agreements or if you take on too many of them within a short period of time, you may end up with an over-burdening cash requirement in the form of rental commitments. Right now our company has a current annual rental cost for its leased plants of close to a half-million dollars. I wouldn't like to



see that figure become too much bigger. It's not that we couldn't cover these commitments under any circumstances; it's just that I don't feel it's economically sound to let cash commitments become too big.

Q. You say that you could handle these commitments under any circumstances. Suppose you were to reach the point where you were operating at a break-even level.

A. Even under those highly unlikely conditions, we could generate enough cash through the depreciation of our owned facilities to cover our lease commitments without any difficulty.

Q. Do you feel, then, that you now have a good balance between owned and leased facilities?

A. Yes, the balance is good and we still have lots of leeway for the future.

Q. *In acquiring other firms, you sometimes use cash and sometimes use stock. Generally speaking, what circumstances most strongly influence which method you use?*

A. Our own cash position at the time of the acquisition is, of course, one factor. Frequently, our method of acquisition is governed by tax and estate consideration of the sellers with whom we may be dealing. This has been the case in a good many of our acquisitions during the past few years. And we think it is very important. For

example, the major stockholders in the other corporations might want to sell out to a larger company, but might not want to take their capital gain immediately. In this case, we could give them stock on a tax free reorganization so that they retain their investment untaxed. They acquire our stock, which has a pretty good market. Our stock isn't listed, but . . .

Q. Excuse me, but why isn't your stock listed? It would seem that Rockwell would have no trouble obtaining a listing on one of the major exchanges.

A. We have received invitations from the major stock exchanges and have analyzed the materials relative to listings but as yet have chosen not to do so. So far we have enjoyed fairly broad distribution in the over-the-counter market and feel our shareholders have not suffered in any way because of our decision. We review the facts periodically—our board of directors is cognizant of the situation.

Q. Do you feel that the trading volume of your stock would be increased if you were listed?

A. We conducted a survey a year or so ago and found that the trading volume of Rockwell stock is greater than that of 60% of the stocks listed on the big board.

Q. How do you account for that?

A. We think our stock has been so active because the over-the-counter securities dealer is more inclined to be a good solid salesman, particularly of stocks that have a sound record behind them. Despite the prestige value of a listing on a major exchange, I think many companies, particularly smaller ones, may be better off unlisted—for a while at least—because the over-the-counter dealer will do a tremendous selling job for them if he is convinced that the stock is a good investment for his clients.

Why Rockwell keeps its plants small and why plants a

Q. *Have you and Col. Rockwell retained a controlling interest in the company?*

A. I would say we have what you would call control these days.

Q. Is it 51% control?

A. No. About 45% of the stock is represented on our board and the Rockwell family holds the largest block. We would prefer to retain our control through good management rather than actual stock ownership. The Colonel and I have always taken the position that when someone can convince us they can manage the company better, we will retire and live off dividend income.

Q. *Why are most of Rockwell's newer plants located in small towns, rather than in larger industrial centers?*

A. I'll have to answer that question in two ways. First of all, we are selecting smaller towns and cities for our facilities because our company wants to be treated as a member of any community in which it operates a plant. We don't want to be treated as just another factory to be tolerated. We want our plant to be an integral part of community life, make its contribution as a corporate citizen and—as an important part of the bargain—reap the benefits that come from a good relationship with the community. We believe this is more readily attainable in a town of 25,000 people or even 10,000 or 5,000 people than in a town of a quarter-million or a half-million people.

Secondly, you must understand that it is our basic philosophy to keep our plants small. We think that in our business, the "optimum maximum" size of a plant should be about 500 shop employees—and we feel that a small plant is most easily adaptable to a small town.

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plants are being located in small towns.

If we had larger plants, getting up into the thousands of workers, we probably wouldn't want them all in small communities, because we don't want to become the overweighing force in a town and we don't want to run a town in which we are located. We don't want to dominate politically, or from a labor supply point of view, or from any other point of view.

Q. What do you feel are the advantages of a small plant, as against a big plant?

A. To start with, we think we get better productivity—a better all-around setup. In a small plant, the people are much more compatible, and the supervisory and management personnel are closer to their

people. In a huge plant, you're not dealing in personality, you're dealing with masses of people—really chunks of people.

Fortunately, in our business, we are in a position to keep our plants small. If one operation begins to get bigger than our "maximum optimum" we can generally split off a segment and start up another plant elsewhere, gradually building this one up to the 500-employee level.

I think you can see from this that the size of the plant comes first, not the size of the town.

Q. Wouldn't your production costs be reduced if you consolidated some of your operations?

A. Probably not. The fact that we have so many products and product variations makes small plants economical. If we tried to consoli-

date our plants into a few huge operations, we might lose our competitive position. We might be spending most of our time shifting over from one short production run to the next. Our costs would spiral. Under our present arrangement we're in a good position to keep each of our plants operating steadily on one or a few specific products or lines.

Q. What influence does your small plant setup have on your marketing and distribution patterns?

A. A very definite influence. Our distribution problems are many, varied and big. In fact, these problems are another major reason why we favor small, widely scattered

"A top executive can no longer work alone because the management job has changed over the last 30 years. Now the top executive's biggest duty is to lead his management team."

Col. Willard F. Rockwell Sr., Board Chairman



"Training is a bigger problem in small towns than it is in established labor centers. But we take on this extra training job because we're building our plants, not for three years, but for 50."

Lloyd A. Dixon
Executive Vice President



plants. They permit us to manufacture near major markets.

Ours is a very sales-minded organization. We've got to be—because our sales and distribution costs far overshadow our production costs. We've got to maintain a valve and meter inventory of 15 or 20 million dollars in order to have the right product on hand in the right place at the right time. Without that inventory we'd lose a lot of business. Further, we've got over a hundred products to sell to about 30 markets. Now obviously, every salesman can't sell all those products. But neither can we afford the luxury of a separate sales force for each line. This brings up a whole series of problems. We've worked out what we think is a complete program for increasing the effectiveness of our sales function, and controlling selling costs. Sales training plays a big part in it. Size of plants and plant site are only a part of the program.*

Q. Does your small plant concept complicate the management job?

A. On the contrary, it simplifies the management job, it cuts the

*How Rockwell solves the selling problems connected with its diversification program is a story in itself—but a story somewhat unrelated to the main theme presented here. The Rockwell sales story will be featured separately in next month's issue.

cost of management, and provides a built-in means of management development. I don't think you'll find many people who'll disagree that it's easier to manage a plant of 400 or 500 employees than one with 4,000 or 5,000.

Q. How does this reduce your management cost?

A. Costs are reduced because the kind of men who can manage a small operation are far more plentiful than the kind of men needed in larger plants. I'll give you an example of what I mean. We recently made a survey to see whether the salaries of the personnel directors in our various plants are in line with salaries paid by other companies. We contacted six or eight of our industrial neighbors here in Pittsburgh—companies like ours with a variety of 400- to 600-man plants around the country. We found that the salary range for our personnel directors is right in line with what these other organizations are paying. But our survey also showed that companies with plants of 2,000 or 3,000 men pay 50% or even 100% more for their personnel directors than we do.

Now, I don't mean to imply that it's the money we are concerned with. It's a question of availability of talent. In the less than \$800-a-month bracket, you can probably find a dozen personnel men to fill

your need and if the first one doesn't pan out, you can generally locate another one without too much trouble. But when you get up into the \$15,000- or \$18,000-a-year bracket, people are more scarce—that is, the kind of people capable of making that kind of money. So I think it's just a question of old-fashioned economics; your management manpower needs are easier to fill in a small plant than in a large one. That applies for everyone from the plant manager through the front line supervisor.

Q. How does your small plant concept provide you with a built-in means of management development?

A. You can bring your people along a lot faster. Take a fellow who is foreman in charge of a good sized department in a 500- or 600-man plant. Now, suppose you have a smaller plant with, say, 100 or 200 men. Generally speaking, the foreman, if he has been a good foreman, can take over as superintendent in the smaller plant, and within a short period of time, learn to do a good job there. If, over a period of years, you build that plant up to 400 or 500 people, your man is learning to become a good general manager or factory manager.

It's an entirely different proposi-

tion trying to build a man's capabilities up to the point where he can run a 3,000-man plant. Such a job probably requires many years of experience. It's a different type of problem, too, because of the point I mentioned earlier: in a small operation, the manager or supervisor is much closer to his people, whereas in a big plant he is dealing with an impersonal mass of people.

The fact that our management people are closer to the worker in the shop and are able to keep them happier, keep them spryer, and get a day's work out of them makes a big difference.

It boils down to this: with a smaller operation, you have an easier job of recruiting the kind of management people you need outside of the company, and, internally, you can build your people up to the kind of bigger jobs that they might not be able to fill in larger outfits.

Q. Well, doesn't the decentralized nature of your company provide a special need for a high caliber top management and staff organization at your headquarters?

A. Yes, it does.

Q. Doesn't this offset the fact that

you can use less experienced men at your plant?

A. I don't think so. We've got good talent in our top industrial relations people, our top industrial engineering people, our top financial people and so on. We certainly have the best men we have been able to find. Right now we're going into our twenty-first plant. It won't be much more of a job for our headquarters management to supervise the operations of 21 plants than it has been to supervise 20. I guess you could say that because of our small, decentralized setup, we have a particular need for a strong headquarters management group. But I think we'd want the strongest people we could find at headquarters regardless of how we were organized.

Q. *Mr. Rockwell, what are the chief factors you consider in selecting a new plant site, or in evaluating the location of a company you would like to acquire?*

A. We rely heavily on recommendations of independent plant location counselors as to specific locations.

Of course, we consider the location in relation to the market to be served and in relation to sources of supply, particularly labor. More important than such things as these, though, to our way of thinking, is the general attitude of the community toward an industrial plant—whether or not they want us there. This single factor influences all of the others. It certainly influences labor supply. There is a big difference between operating a plant in a friendly atmosphere and operating in an atmosphere of antagonism or misunderstanding. And it makes a big difference when the people of the town really want you there.

Despite all the work that states, cities and towns and utilities are doing to bring new industry into their locations, there are still lots of places where industry is not at all welcome. I have a friend, for example, who would like very much to put up a plant in a certain spot in California. It's an agricultural location, dominated by big fancy vegetable farms. The men who own these farms have made it quite clear that they don't want industry to come in there and compete for labor. The farmers know that their best workers would like to have good year-round plant employment instead of the seasonal

(continued on page 89)



"When we enter a new plant location, we don't want to be in a position of competing with other firms for scarce labor. On the other hand, we prefer not to be the only industry in the town."

Lloyd A. Dixon, Jr.
Vice President

HOW TO DETERMINE YOUR Span of control

An executive can make the best use of his time only when he maintains the right span of control. The same applies to an over-all management organization. Certain preliminary steps must be taken before span of control can be determined.

by James H. Healey

Director Management and Business Services
The Cooperative League of the USA
Columbus, Ohio

"Got a minute, Bill?"

At the sound of these familiar words, Bill Smith, vice president, looks up with an inward moan. Again today, he thinks.

It seems that Vice President Smith never has time to get to the things he should be doing. All day long he is interrupted by his subordinates. Each time he gets his own thoughts organized on something he is doing, one of his men pops in to check on some instructions, to turn in a report, or to get his advice on how to handle a problem. At the end of the day, he has accomplished little or nothing, goes home with a bulging briefcase.

This situation is a symptom of an inefficient span of executive control. Possibly Vice President Smith does not believe in delegation. More likely, he simply has too many people reporting to him. The result is a constant drain on a company's most valuable asset: a high echelon executive's time.

Symptoms of weak span

How can you determine when you are suffering from too broad a span of control? There are many symptoms (*see box, next page*). Perhaps the most subtle symptom of a faulty span lies in the area of executive morale. Consider what can happen to executive morale as a result of the wrong span of control.

Suppose we have a chief executive with a large number of executives reporting to him. These executives are responsible for functions that are of varying degrees of significance in the total operation of the enterprise. Naturally the chief executive must conserve his time. More than likely, he spends the greater portion of his time with executives responsible for the key functions. This means that the other executives—and the functions they handle—receive little if any top management attention.

Over a period of time, because

the chief executive has set up a span of control that is too broad, an informal organizational pattern evolves. The executives who can't get to their boss begin to communicate to him through their colleagues who can. Thus a new, hidden level in the organization is created—a level of which the chief executive is unaware.

Morale of the executives representing the secondary functions is low. They recognize that they hold "paper" vice presidencies. While they appear on the organization chart as members of a certain echelon of organization, they know that in fact they are not on that level.

The situation may degenerate to the point where subordinates actually invent reasons for gaining access to the chief executive—creating extraordinary problems that require his attention. It may even lead to their stalking him to the elevator at night.

If an executive's span of control

—even though within traditionally accepted limits—does not permit him to accord personal attention to each of his subordinates on a continuing basis, the span is too big.

Why spans differ

Your span of control depends upon you as an individual. Some executives successfully handle 15 or even 20 subordinates, making each feel important as an individual. Other leaders find it better to limit the number of subordinates more sharply, because of the type of work involved or because of their over-all executive methods. Many executives have a span that includes only three or four subordinates. Some chief executives use a lone subordinate, an executive vice-president.

A number of factors must be carefully considered in determining spans of control within your organization. Following is a discussion of specific steps that will guide your company to tentative decisions regarding appropriate spans of control for people throughout your management organization. These are followed by some general factors that must be evaluated before you finalize your decisions.

1. Make certain you have a primary company objective.

A prerequisite to determining span of control is to have a basic objective set for your company and clearly understood at all levels. If the objective is not set, or if it is not generally known, some people will include within their spans jobs that have no relationship to the company's true goal.

Recently the president of a large multi-plant company indicated that the basic objective of his firm was to maximize profits. He was asked if he had indicated this goal to his vice presidents. "Of course not!" he replied. "You don't expect them to work for that, do you?" Presumably he indicated another goal to his vice presidents; perhaps they in turn indicated still another to their subordinates—and so on down the chain of command. The result is confusion as to which activities should be emphasized and which diminished.

2. Determine which company activities contribute to the basic objective.

Once a single objective is set and



SYMPTOMS OF POOR SPAN OF CONTROL

Many symptoms point to a poor span of control, among them these:

- When you don't have enough time in the day to accomplish the important responsibilities of your position.
- When deadlines are regularly missed, or important actions are not taken on time. Examples: The theme of an advertising campaign for the spring season is late. The choice of a new design pattern is made too late to meet production lead time so that the new product can come out in time to meet competition. Selection of a new sales manager for a critical territory is delayed too long.
- When the superior is no longer able to sharply differentiate between areas of responsibility of his subordinates. If he must pause to ask, "Now which of my men should get this problem of work layout?" he has the wrong span. It may be too big, and the responsibilities too sub-divided; or it may be too small, and the responsibilities of subordinates not clearly differentiated. Job descriptions will help.
- When one or two subordinates are overworked. In the presence of unexplained fatigue, for example, you should question the division of work. If necessary, consider creating a new position to relieve the load on a critical position.
- When one or two of your subordinates seem to have little to do. In this case you may be able to combine jobs, reduce your number of subordinates, and thus reduce your own span of control.
- When there is communication failure in the chain of command. If the instructions you give are changed during transmission to lower levels of the organization, examine your span of control as a contributing factor. Too narrow a span means too many separate levels of communication; this increases the possibility of errors in transmission. Too broad a span may produce the same type of faulty transmission, but horizontally rather than vertically.

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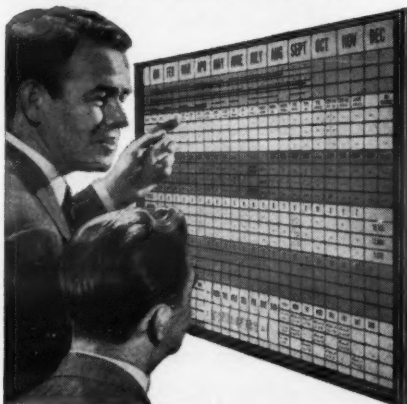
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clearly understood, it can serve as the basis for determining span of control in the organization.

To expand this point, let's use an example of a very simple business, a gasoline service station. The operating objective of the owner-manager is to make the greatest possible return on sales through a broad range of automobile services to his customers. What activities are necessary to achieve this objective? Certainly they include pumping gas and providing oil, lubricating and washing service. But should they include selling tires and auto accessories? Since the objective is

This article covers the chief considerations in your span of control and discusses how span of control affects organization planning. A book, written by the author of this article, is available for those interested in delving deeper into the subject: *Executive Coordination and Control*, by James H. Healey. Bureau of Business Research, The Ohio State University, Columbus. 355 pp. 1956. \$5.

to provide a broad range of auto services, the tires and accessories selling activities should be established. These become part of the service station manager's span.

3. Array activities in order of importance.

When all the activities needed to support the basic objective have been established, the next step is to rank the activities in order of importance.

Returning to the example of the service station, suppose the manager finds that sale of accessories represents the major profit potential. Then obviously this activity deserves special consideration in determining his span. At this point he may consider handling the sale of accessories himself, rather than delegating the function.

Top executives are often faced with the same decision. The president of a fairly large shoe company, for example, has decided to serve as his own sales manager. He feels the sales function is so important that he should personally supervise it. (This adds a new dimension to his span of control since he is actually operating on two distinct levels.) A close examination might indicate that the president should appoint someone as sales manager.

4. Determine volume of activities.

After deciding which activities really contribute to your company's underlying objective and arraying them in order of importance, the next step is to determine the volume of each activity.

Again let's return to the simple case of the service station. Accessory sales has been determined as the most important operating activity—but how much volume is there likely to be in this activity? Enough to occupy a man full-time? Two? Three? If the volume will require only part of the time of one man, then the manager can continue to consider the possibility of handling accessory sales himself. Otherwise he must obviously delegate the job and begin to build up his span.

In your business, it may not always be easy to forecast volume for specific activities, particularly top level management activities. The reason is that *thinking* time enters into the picture. Can a company's thinking be specialized into a separate position? Can the job of thinking be divided up into line and staff segments? How much thinking time will be required in various segments?

These questions, difficult as they are, must be dealt with if the appropriate span of control for various positions is to be determined. 5. Plan the division and combining of activities.

With the volume of each activity forecast, it is possible to determine what combinations of low volume



**ABOUT
THE
AUTHOR**

James H. Healey, Director of Management and Business Services, The Co-operative League of the USA, has had extensive experience in executive development programs, including those at Ohio State University and the American Management Association. In addition to his latest book, *Executive Coordination and Control*, he has co-authored *Introduction to Business Management*, published by Ronald Press, and is now working on a book in the purchasing field.

activities are possible, and what divisions of high volume activities are necessary. A general rule is that greatest efficiency results from the combination of similar activities. Dissimilar jobs can often be advantageously combined; however, when dissimilar activities are combined a lower volume of output can be anticipated.

When it is necessary to divide high volume work into two or more positions, care should be taken in selecting the proper basis of division. For example, in some firms it is best to break down the selling job geographically; in others it is best divided by product.

General factors

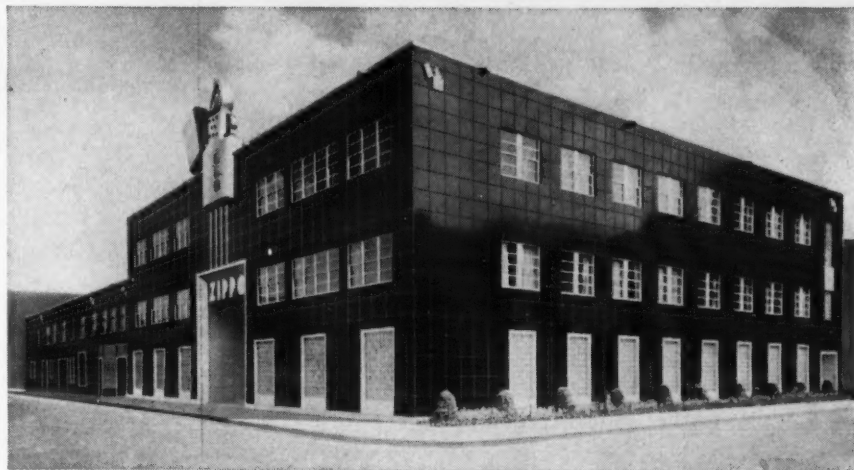
When you have combined and divided activities, the result will be tentative positions because still other factors must be considered before firming up spans of control. Some of these factors are:

Time: There are two types of companies where time is found to be a particularly important factor in determining span of control. The first is the company where top executives are called upon for a high degree of creative effort. The second is the firm characterized by centralized management. In each case, the executives—and particularly the chief executive—are usually called upon by subordinates for extended conferences. They must devote personal attention over long periods of time to many aspects of the operation. Consequently they must reduce their spans of control as much as possible to accommodate these demands.

Personal interest: Since a man's interest in his work helps to determine his effectiveness, personal interests should be considered in determining spans. For example, if a top executive has a background in sales, he can probably work well with the advertising manager and credit manager as direct subordinates. On the other hand, he would probably find it more difficult to work with the head of the engineering department as a direct subordinate, and could have engineering report through production.

Costs: Each new subordinate at the higher executive levels adds a significant salary burden, as well as a multitude of indirect costs. However, if you decide to keep costs

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down by limiting top level positions to a minimum number, the result may be more levels within the company. In setting up spans of control, therefore, these two considerations must be carefully balanced.

Management philosophy: A major determinant in setting up span of control is the executive's management philosophy. If he believes in decentralization and delegation, he will be prone to accept a higher span than executives who are unwilling to delegate.

Other aspects of the executive's management philosophy also affect his span. If he uses staff assistants, he can normally handle a larger number of subordinates. The same applies if he makes a practice of using written policies and written communications, which reduce the chances of his instructions being misunderstood, or misinterpreted as they pass to the subordinates within his span.

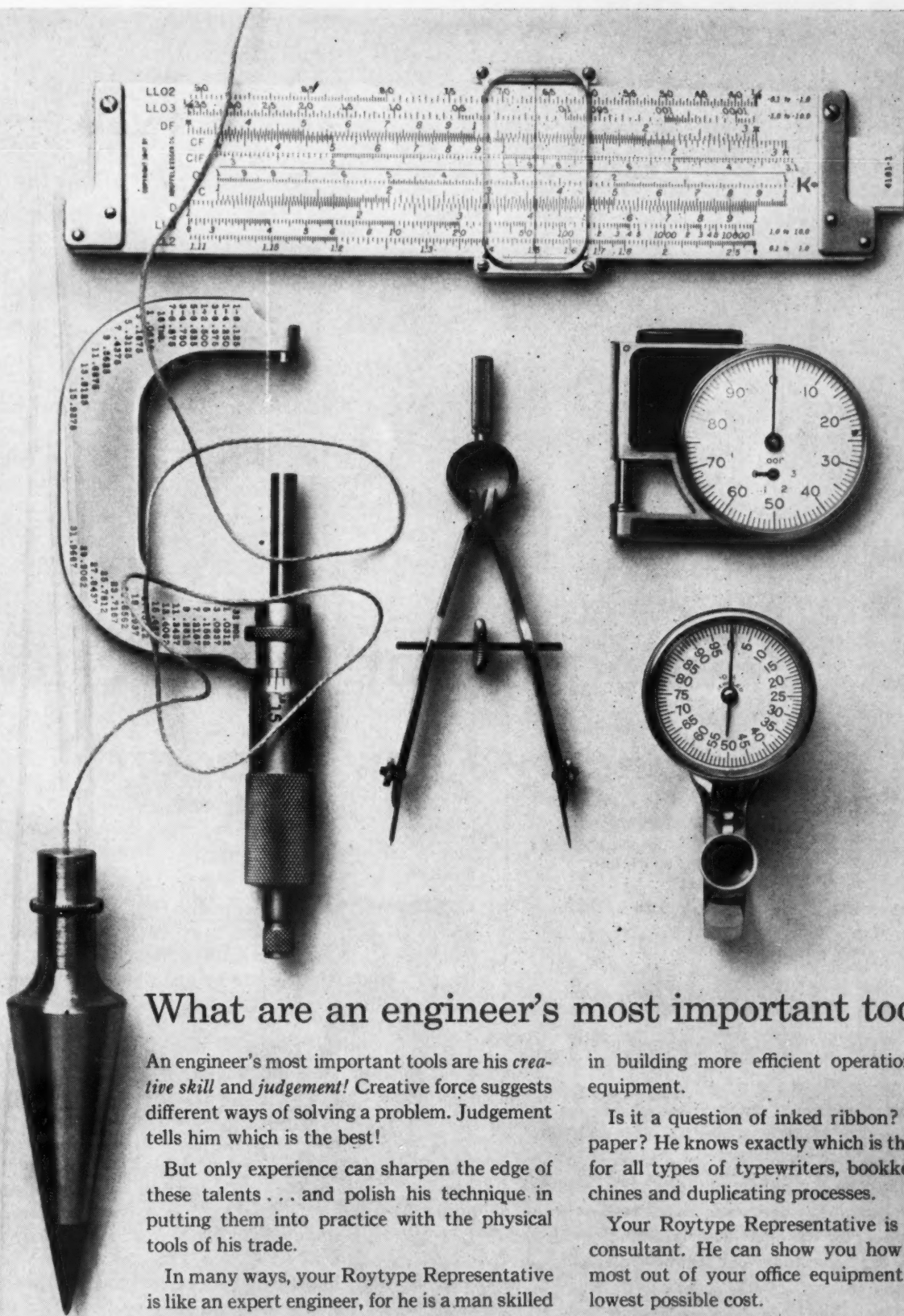
Size of organization: Span of control tends to increase with the size of the organization. The higher span of larger units arises from the greater presence of subsidiary, semi-autonomous operations, and the greater employment of specialized staff personnel.

Age of firm: In older companies, particularly where the management personnel have worked together for a lengthy period of time, greater spans of control are possible.

Fixing span of control

Based on careful analysis of all of these factors, a span of control for each position in the management organization will begin to emerge. But it should be emphasized that the final fixing of span should be based on the *personality* of the executive as much as on any other consideration. Furthermore, it should be remembered that spans seldom remain fixed. Experience will show that some executives function better with a smaller span than they have been assigned, while other executives will learn to handle an increasingly larger span. As new people are brought into the organization and as the dynamics of company growth exert themselves, the need for changes in span at various levels will continue.

The alert management is prepared to make changes in span of control as needs arise. m/m



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Management mediocrity: *Industry's new standard?*

THE ORGANIZATION MAN. William H. Whyte, Jr. Simon and Schuster, New York. 429 pp. \$5. Copyrighted 1956 by William H. Whyte, Jr.

William H. Whyte, Jr. has written a book which will be—during 1957—an abominable spectre in the corporate halls of America. His subject is the American executive class. His thesis: these Organization Men, while they offer lip-service to the American Dream of success through initiative and ingenuity, actually pay allegiance to a self-perpetuating “collective” called The Organization. Within The Organization one is “middle-of-the-road.” Creativeness is a staff function—the line officer is a coordinator, a manipulator of people. The individual is subordinated to The Team—and The Team looks out for the individual.

Mr. Whyte's theme has been developed in the past, by Riesman in *The Lonely Crowd* and by Mills in *The Power Elite*. But never before has it been presented so readably—or with such impact.

Summation: easy-to-read, disquieting, important.

Following is a small, but typical fragment.

Let's examine . . . the model [of the “well rounded” executive] as younger men see him. They are in remarkable agreement on the matter . . . from company to company, region to region, you hear a litany increasingly standard. It goes something like this:

Be loyal to the company and the company will be loyal to you. After all, if you do a good job for the organization, it is only good sense for the organization to be good to you, because that will be best for everybody. There are a bunch of real people around here. Tell them what you think and they will respect you for it. They don't want a man to fret and stew about his work. It won't happen to me. A man who gets ulcers probably shouldn't be in business anyway . . .

Somewhat inconsistently [management] trainees hope to rise high and hope just as much not to suffer the personal load of doing so. Frequently they talk of finding a sort of plateau—a position well enough up to be interesting but not so far up as to have one's neck outstretched for others to chop at . . .

For the executive of the future, trainees say, the problem of company loyalty shouldn't be a problem at all. Almost every older executive you talk to has some private qualifications about his fealty to the

Young men entering management's ranks today worship a new idol: the "well-rounded" man. They view as old-fashioned — even immoral — such forthright executive qualities as drive, self-reliance, independent thinking, ambition. Today's newcomers are molded to conform to more moderate ideals — ideals which, they believe, result in "the good life."

company; in contrast, the average young man cherishes the idea that his relationship with The Organization is to be for keeps. Sometimes he doesn't even concede that the point need ever come to test.

Their attitude toward another aspect of organization shows the same bias. What of the "group life," the loss of individualism? Once upon a time it was conventional for young men to view the group life of the big corporation as one of its principal disadvantages. Today, they see it as a positive boon. Working with others, they believe, will *reduce* the frustrations of work; and they often endow the accompanying suppression of ego with strong spiritual overtones. . . .

On the matter of overwork they are particularly stern. They want to work hard, but not too hard; the good, equable life is paramount and they see no conflict between enjoying it and getting ahead. The usual top executive, they believe, works much too hard, and there are few subjects upon which they will discourse more emphatically than the folly of

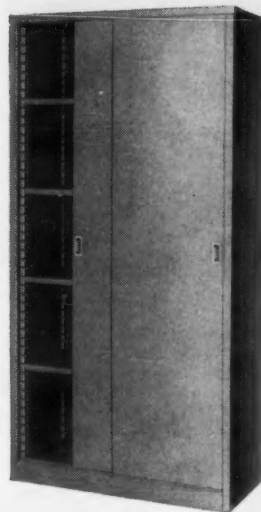
"Personnel men quite often . . . infer that the individual should be carefully segregated out of harm's way if he should be tolerated at all."



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elders who have a single-minded devotion to work. Is it, they ask, really necessary any more? Or, for that matter, moral? . . .

A young man's idle dream? It is a playback only mildly exaggerated of a vision of the future that is becoming stronger and stronger among personnel executives and the business-school people who intellectualize for business. And their influence should not be underrated. The personnel men are of the staff, rather than the line, but it is they who choose the trainees and administer the schools that affect trainees in their formative years with the corporations.*

What personnel men have in mind as the manager of the future is more of a departure than is generally recognized. Personnel executives don't care to insult the company's brass and, except in the privacy of the conferences and workshops endemic to the field, they manage to muffle the criticism of the top executives their new model implies. For another thing, most definitions of executive traits are so encompassing that no matter how radical or conservative one's views of the future executive, there will be comfort in almost any of the usual all-purpose definitions. The executive, everyone agrees, must be forceful, patient, able to get along with other people, foresighted, imaginative, decisive, and of sound views.

But what, among these contradictions, is to be emphasized? To draw personnel people and executives out on the matter I tried an experiment. Out of the usual inventory of executive qualities I drew out two antithetical definitions. . . . I then wrote to 150 personnel directors and asked them to say which one they inclined toward. At the same time, I sent an identical letter to 150 corporation presidents.

If they *had* to choose, I asked them, which of the following schools of thought would they favor:

- "Because the rough-and-tumble days of corporation growth are over, what the corporation needs most is the *adaptable* administrator schooled in managerial skills and concerned primarily with human relations and the techniques of making the corporation a smooth-working team."
- "Because the challenge of change demands new ideas to keep the corporation from rigidifying, what the corporation needs most is the man with strong personal convictions who is not shy about making unorthodox decisions that will unsettle tested procedures—and his colleagues."

The response was spirited. Many of the hundred who answered jumped on me for asking such a question, but most of them did choose one way or the other and, more importantly, they went into their reasons at length.†

The vote: presidents voted 50% in favor of the

*The number of personnel people, compared to other employees, has been rising at a rapid rate. A study made by Dale Yoder and Mona L. Walz of the University's Industrial Relations Center indicates that by 1955 there were eight personnel people per 1,000 employees—a jump of 15% over the seven per 1,000 in 1954.

†We had expected that the type of industry the executive was in and the size of the company would have a great deal to do with the way he answered. This did not turn out to be the case. No matter how we tried to correlate the answers, by type of company, age, etc., no pattern manifested itself; the choice, evidently, was primarily a reflection of the executive's own personal outlook.

administrator, 50% in favor of the other type; personnel men: 70% for the administrator.

In the wording of their letters, the personnel men showed an inclination to the administrator even stronger than the vote indicated. Presidents who favored the administrator generally noted that the individualist had his place too; personnel men quite often not only failed to make such a qualification but went on to infer that the individualist should be carefully segregated out of harm's way if he should be tolerated at all. They were, furthermore, strikingly

"Some personnel men went out of their way to warn against inner qualities such as 'drive' and 'imagination.'"



unanimous in their explanations: among the 70% voting for the administrators the explanations offered so complemented one another as to produce a quite cohesive philosophy. Here, in paraphrase, is the gist of it:

The rough-and-tumble days are over. Since the job is to keep things going, more than pioneering, the leader must be the professional manager, "the man who knows how to elicit participative consultation, how to motivate groups and individuals, how to enhance job satisfactions . . . how to conduct problem-solving meetings." He will be a generalist who will not think in terms of specific work, but in the science of making other people work.

In the old sense of work, he does not work; he encourages others to work. He does not create; he moderates and adjusts those who do create. "Primarily he is the balance wheel on the tendency of the professional-type individual to wander into new, unexplored, and perhaps dangerous territory."

Unorthodoxy can be dangerous to The Organization. The pro-administrators sometimes conceded that the administrator could have unconventional ideas himself at times. But, they were in haste to add, he ought to be rather sober about it, and it was on the dangers rather than on the advantages of such unorthodox thinking that they dwelled.*

Unorthodoxy is dangerous to The Organization. Some personnel men didn't simply omit mention of inner qualities such as "drive" and "imagination"; they went out of their way to warn against them. "Any

*When we checked the words that recurred most often in letters, we found that among presidents the most frequent were "imagination," "vigor," "judgment," "dynamic," and "aggressive." Except for those personnel men who voted for the individualist (and in fairness it should be noted that some were as strong as presidents on this score), personnel men tended to use words like "harmonious," "co-operative," etc.

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Completely private internal telephone system, independent of the regular switchboard. Includes a "memory" circuit, "executive-right-of-way," conference conversations, even use of the handset as a paging microphone!



CUSTOM-BUILT JOBS

The scope of the Stromberg-Carlson line, plus a nationwide corps of factory-trained representatives, provide "tailored" solution to any communication problem.



All offered on LEASE

Upon inquiry, we will make a *free* survey of your premises and a *free* engineering proposal tailored to your needs. The installation and the servicing of the system will be done on a lease basis, without a penny down payment. In other words, there is no capital investment—just a regular expense of business. Write today!

"There is nothing finer than a Stromberg-Carlson"

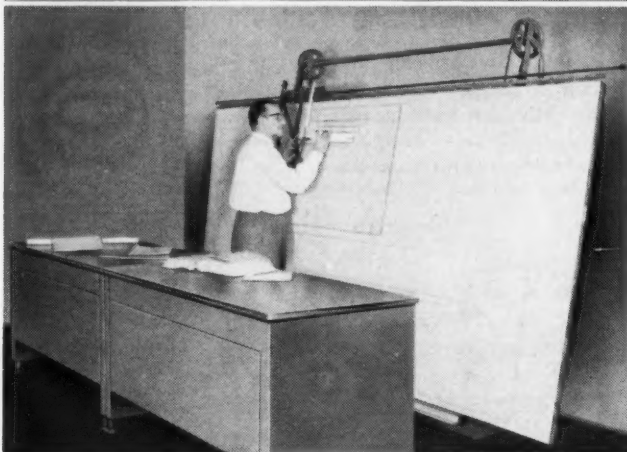
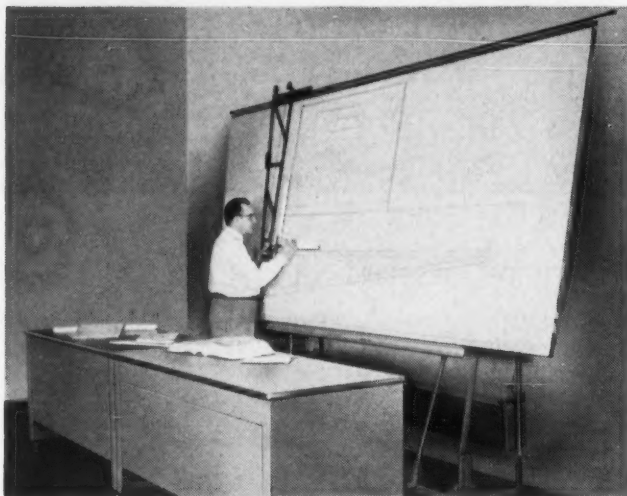


STROMBERG-CARLSON COMPANY
A DIVISION OF GENERAL DYNAMICS CORPORATION
SPEC. PRODUCTS DIV. • 1703 UNIVERSITY AVE. • ROCHESTER 3, N. Y.



(Circle number 627 for more information)

- Full-scale drawings contribute more towards the elimination of costly design and manufacturing errors than any other factor in the drafting room.



EMMERT COUNTER-BALANCED FULL-SCALE DRAFTING UNITS

Emmert Full-Scale drafting Units equipped with Emmert Micro-Drafters provide the operator with the most accurate, efficient and easy to use drafting unit ever manufactured. Position changes to any area of the board surface can be accomplished in seconds—there are never any blind spots. Long, continuous, parallel lines, either horizontal or vertical, may be drawn the entire length and height of the board with an accuracy unmatched by any other drafting equipment. The Micro-Drafter's Micro-Matic Quadrant provides rapid indexing from 0° to 360° and adjustment to 2½ minutes with absolute accuracy.

Perfectly counter-balanced and equipped with self-alignings, the units raise and lower with a smooth gliding action. Once positioned, the unit remains in place without locking.

Emmert Full-Scale Units are made in 44 standard sizes, from 42" x 72" to 11' x 30', as well as custom sizes to meet any particular demand. One installation alone employs 15 Emmert Full-Scale Units, 7 feet high by 141 feet long.

● Write today to Emmert Mfg. Co., Dept. M. Waynesboro, Pa., and learn how these units can fit your needs.



(Circle number 628 for more information)

progressive employer," said one personnel director, "would look askance at the individualist and would be reluctant to instill such thinking in the minds of trainees." Another personnel man put it in more direct terms. "Men of strong personal convictions, willing to make unorthodox decisions, are more frequently given to the characteristics of 'drive' *rather than leadership.*" (Italics mine). This invidious pairing of qualities once thought congenial with each other was not restricted entirely to personnel men. "We used to look primarily for brilliance," said one president. "Now that much-abused word 'character' has become very important. We don't care if you're a Phi Beta Kappa or a Tau Beta Phi. We want a well-rounded person who can handle well-rounded people."

Ideas come from the group, not from the individual. The well-rounded man is one who does not think up ideas himself but mediates other people's ideas, and so democratically that he never lets his own judgment over-ride the decisions of the group. "The decisions should be made by the group," says a personnel director, "and agreement reached after discussion and consultation prior to action." "The leaders must be attentive and receptive to the ideas of his followers," says another personnel man, "and he must adjust his ideas accordingly."

If the corporation concentrates on getting people who will process other people's ideas, where will it get the other people—that is, the people with ideas? Some of the pro-administrators did concede that a question was left begging. Where would the spark come from? How could a corporation ever change to new ways if the top man was so concerned with equilibrium? They submitted a solution:

Creative leadership is a staff function. Organizations need new ideas from time to time. But the leader is not the man for this; he hires staff people to think up the ideas. While the captive screwball thinks about the major problems of the corporation, the leader—a sort of nonpartisan mediator—will be



"If the corporation concentrates on getting people who will process other people's ideas, where will it get the other people?"

able to attend to the techniques of solving the problem rather than the problem itself. "He will be able to accomplish change without upsetting relationships," explains one, "because he has been trained to think about *how* the change should be accomplished quite as much as to think about what the change should

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be." His job is not to look ahead himself but to check the excesses of the kind of people who do look ahead. He does not unbalance himself by enthusiasm for a particular plan by getting involved with the basic engine. He is the governor.

In part, this vision of the new management can be

"The 'well-rounded' ideal . . . is self-proving . . . Many junior executives help out on the interviewing necessary to restock the cadres."



explained away as rationalization. For the trainee it masks the conflicts ahead; for the personnel man it affords a function and status for what is still a highly ambiguous field of work. "From where we sit in the company," says one of the best personnel men in the country, "we have to look at only the aspects of work that cut across all sorts of jobs—administration and human relations. Now these are aspects of work, abstractions, but it's easy for personnel people to get sohipped on their importance that they look on the specific tasks of making things and selling them as secondary. It's heresy, but I swear I am not so sure human relations are really any better than they were 20 years ago. We just talk about them more, and the muddy-headed way so many of us do gives young men a very bum steer."

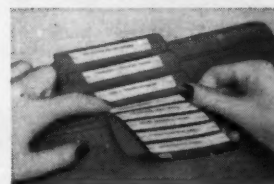
But, even if the "well-rounded" ideal were no more than rationalization, the concept would still be powerful. It is self-proving. As an example of one very practical consequence we have only to note that in many large corporations the junior executives help out on the interviewing and selecting necessary to restock the cadres. As the trainees go back to the campus to search for their own image, they go back strengthened more than ever in their anti-intellectualism, and in a great Mendelian selection process well-rounded men who were chosen by well-rounded men, in turn chose more well-rounded men.

It is possible that a genius, supposing he wanted to join the company in the first place, could so feign the role of the well-adjusted extrovert as to hoodwink a trainee into giving him a job. But he'd have to be skillful about it. A group of GE trainees were asked what they would do if a brilliant person like Steinmetz were to apply to them for a job. After some thought, a few trainees said they thought maybe he could work out; because of the fraternity-like life of the training program, they "could iron out his rough spots." Others disagreed; the man would be too hopelessly anti-social to remold. "I don't think we would put up with a fellow like that now," one said. (Fortu-



with new **AVERY** adhesive file folder labels

Yes—labeling file folders is now fast and clean—no longer a chore. There's no sticky, gooey sponge to wet and handle . . . no bad-tasting mucilage to lick. Avery labels are on at the touch of a finger . . . easily, neatly and quickly.



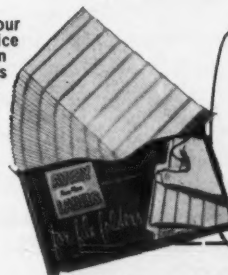
They're *color coded*—in a selection of 10 beautiful colors plus white—for fast, positive identification and reference.

Improve the appearance of your files by color-coding and relabeling each folder with Avery adhesive File Folder labels. Expensive folders can be re-used and still remain neat and presentable in your files.

Filing *can be fun*—if you do. They'll make your job easier—and a boss's business more profitable.

fastest . . . to apply . . . easiest to use . . . and color-coded, too!

Available from your stationery or office supply dealer—in sheets of 8 labels with guide lines for uniform typing—and the last label won't slip in the typewriter because of the extended backing sheet!



AVERY
adhesive labels

Completely revolutionizes office filing—See them . . . try them today! Write for your **FREE** samples of Avery file folder Labels—

... Then **BUY** them at your stationery dealer!

AVERY ADHESIVE LABEL CORP., DIV. 150

117 Liberty St., New York 6 • 608 S. Dearborn St., Chicago 5 • 1616 S. California Ave., Monrovia, Calif. • In Canada, 48 Haas Road, Toronto 15, Ontario • Offices in Other Principal Cities.

Please send me samples of Avery file folder Labels.

My Name Position

Company

Address

City State

Circle number 629 for more information

Force COLUMBIA

eases tired eyes ...cuts errors!



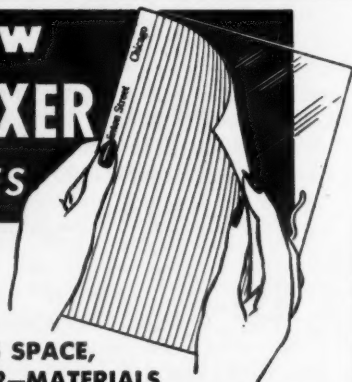
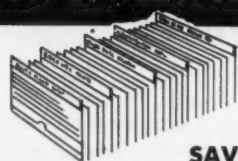
This automatic numbering machine prints big $\frac{3}{8}$ " high figures on filing jackets, time cards, job envelopes, drawings, etc. Saves eyesight of young and old alike and reduces errors, too! 6 or 7-wheel capacity . . . consecutive, duplicate, repeat action.

$\frac{3}{8}$ " DEEP CUT NUMBERS
493527

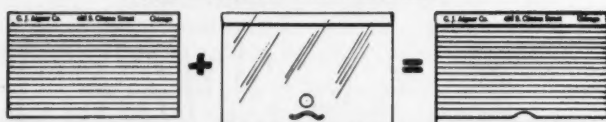
WM. A. **FORCE** & CO., Incorporated
216 Nichols Ave.
Brooklyn 8, N. Y.
Sales Offices: NEW YORK • CHICAGO • SAN FRANCISCO • MONTREAL

(Circle number 630 for more information)

AICO'S NEW SELF-INDEXER for CARD FILES



**SAVES SPACE,
TIME—LABOR—MATERIALS**



Any Card Inserted Into AICO'S Transparent . . . Plastic "SELF-INDEXER", (shown above), becomes . . . An Index Guide At Guide Height!

IT'S THE NEW, FASTER, MORE ECONOMICAL WAY TO INDEX YOUR CARD FILES!

With AICO's new, transparent, plastic, "Self-Indexer", you can make, in seconds, an Index Guide out of any card in your file. Just slip the card into the double lip at the top and the slot at the bottom of the "Self-Indexer", and, the combination becomes an Index Guide, at guide height, $\frac{3}{8}$ " above the other cards. Made of heavy gauge plastic, the "Self-Indexer" won't chip, crack, split nor tear. In 4 sizes, including Tabulating card size. Special sizes made to order.

AICO
INDEXES

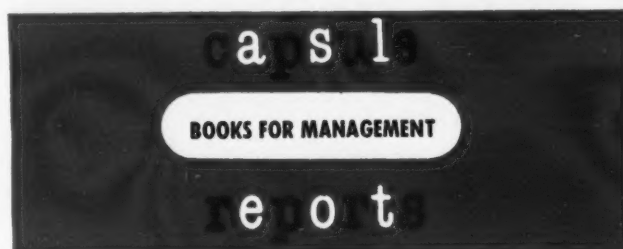
FREE: Write Dept. 30 for Free Sample, literature, and name of your nearest supplier.
44-16 23rd St., Long Island City 1, N. Y.
426 S. Clinton St., Chicago 7, Illinois

(Circle number 631 for more information)

nately for GE's research division, as we will see later, it does not use trainees as recruiters.)

From company to company, trainees express the same impatience. All the great ideas, they explain, have already been discovered and not only in physics and chemistry but in practical fields like engineering. The basic creative work is done, so the man you need—for every kind of job—is a practical, team-player fellow who will do a good shirt-sleeves job. "I would sacrifice brilliance," one trainee said, "for human understanding every time."

And they do, too. m/m



Key to advertising

ADVERTISING HANDBOOK, edited by Roger Barton. Prentice-Hall, Inc., New York. 1956 (third printing). 1015 pp. \$8.

An excellent reference book for the man concerned with any or all phases of advertising is the new, updated edition of *Advertising Handbook*. Comprehensive coverage is given to every aspect of modern advertising activity by 33 executives thoroughly familiar with the particular field they write about.

A principal attraction of this volume is its topical sequence which conforms exactly to the manner in which a product or service is presented to the public. Other features include descriptive illustrations throughout and a detailed index of material contained within. The volume provides a ready aid for the executive in solving immediate problems of advertising.

Wit and wisdom in English

A DICTIONARY OF AMERICAN-ENGLISH USAGE, edited by Margaret Nicholson, Oxford University Press, New York. 1957. 671 pages. \$5.

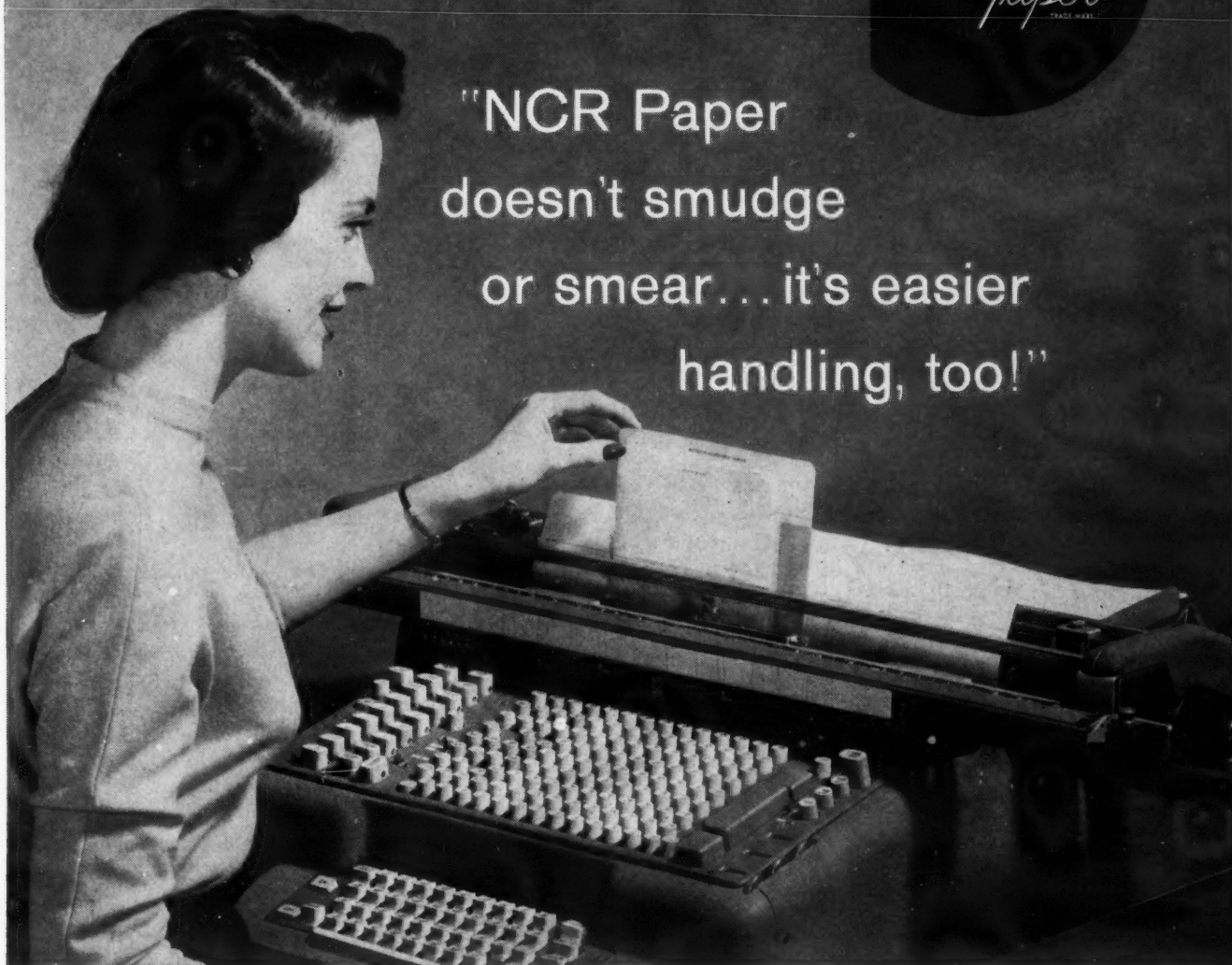
Since the publication in 1926 of H. W. Fowler's fact-filled guide to proper and precise usage, and its subsequent elevation to a classic, many changes have affected language uses. An adaptation and modernization of Fowler's *Modern English Usage*, the new *Dictionary of American-English Usage* creates a ready and useful companion volume for the busy word user.

The new reference work has been brought up-to-date by adding new words and articles wherever necessary, omitting obsolete material and the former discussions depending on a knowledge of Greek and Latin. It includes American variations of usage, spelling and pronunciation. Without sacrificing Fowler's scholarship and wit, many of his longer and more complicated entries have been simplified and rearranged to enable the reader who is pressed for time to find answers more readily.

No Carbon Required with NCR Paper

NCR
no carbon required
Paper
TRADE MARK

"NCR Paper
doesn't smudge
or smear... it's easier
handling, too!"



Here is the paper you and business form users everywhere have been waiting for! Paper that produces clean, clear copies *without* carbon paper or other carbonization. The research laboratories of The National Cash Register Company have developed a special paper — called NCR (No Carbon Required) Paper — which eliminates all the slow, messy handling of carbon sheets. It works equally well with a business machine, typewriter, or pencil. These are the wonderful advantages NCR Paper offers you:

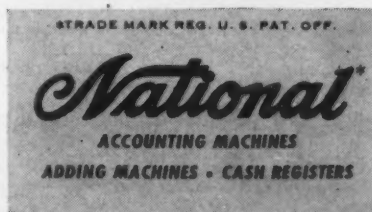
- **Cleaner, clearer copies**... Up to 5 legible copies with standard typewriter, ball-point pen, or pencil. Eight or more neat copies when used with business machine or electric typewriter.
- **Faster, easier handling**... No handling of flimsy carbon inserts, no removing or storing.
- **Non-smearing**... No smearing or smudging of copies or fingers. Making copies is as easy as putting together 3 or 4 (or more) forms and inserting them in business machine or typewriter. Speeds writing of invoices, purchase orders, shipping records, etc.
- **Ends carbon paper disposal**... With NCR Paper, removal and disposal of used carbon sheets is eliminated.

Have your forms printed on NCR Paper by your present forms supplier. You'll be amazed how easily it solves the problem of producing multiple copies. You'll get better, cleaner copies in less time!

THE NATIONAL CASH REGISTER COMPANY, Dayton 9, Ohio

989 OFFICES IN 94 COUNTRIES

(Circle number 632 for more information)



Home Study Course In Programming Business Computers

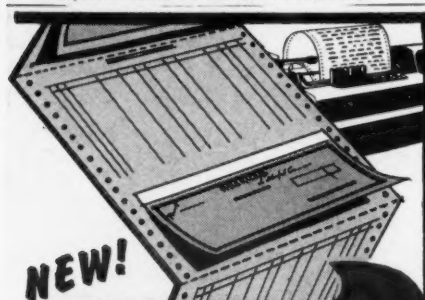
A home study course, the first and only one of its type, is being offered by Business Electronics Inc. Designed for people without technical training or experience, it is based on a similar course members of the firm developed and are teaching at a large University.

Students are taught to develop and program electronic systems for business problems such as Payroll, Accounts Receivable, Inventory Control, etc. for a theoretical electronic computer called BEC.

BEC was designed for instructional purposes and includes the best elements of commercially available computers. The knowledge the student gains from BEC can be applied to any computer. "Programming for Business Computers" provides an opportunity for the student to study at home at his own convenience for only a few cents a day.

Free brochures describing the course are available upon request from Business Electronics Inc., Educational Division, 420 Market Street, San Francisco 11, Calif.

(Circle number 634 for more information)



NEW!

ELECTRONIC CHECKS ON LITHOSTRIP Continuous Forms

SAVES up to 90% of sorting costs
with automatic reconciliation

NOW!

PRE-PUNCHED, PRE-NUMBERED TAB CARD CHECKS "ride free" on CONTINUOUS forms... useful on tabulators, teletypes or typewriters. CHECK RECONCILEMENT is obtained at a tiny fraction of manual cost by using punched card sorter, collator and tabulator.

ELECTRONIC CHECKS also available on Litho-sets... requires no change in your present method of preparing checks.

We engineer many types of office forms. CONSULT US.

AMERICAN
Lithofold Corporation
500 BILTMER ST. ST. LOUIS 15, MO.

(Circle number 633 for more information)

consensus

ELECTRONIC BRIEFS WORTH REPEATING



Effect of anti-trust decree on sale of computers

A recent survey conducted by a New York University student indicates the federal anti-trust decree on the sale and rental of electronic computers will have only a "slight immediate" effect on industry. Prior to the decree, IBM Corp. had followed the practice of renting only.

Designed to ascertain customer preference, the survey was conducted among non-IBM users who have always had the buy-or-lease option. Of the 146 respondents, 17% owned electronic computers and 83% leased them. About 80% of those who leased computers listed "the fear of obsolescence" as the primary reason for not buying them.

Some of the other reasons included: large amount of capital involved in purchase; uncertainty about meeting company needs; and no responsibility for maintenance.

If IBM customers react to the option as those who participated in the study have, fewer than 20% of the IBM computers manufactured this year will be purchased.



Tape and card punch unit

A new machine which can produce any style of typed document and simultaneously create tabulating cards is announced by Commercial Controls Corp., Rochester, N. Y.

Called the Flexowriter Tape and Card Punch, Model FTCP-8, the new unit is adaptable to most processing work. Punching data selected for either tape or tabulating

cards is controlled automatically by the tape. A switch control permits the machine to be used for other programatic applications without the card punch being connected or



turned on. Operator decisions are eliminated and all repetitive information is handled automatically.

Operating automatically at 572 codes per minute, the Flexowriter Programatic Tape and Card Punch offers speed, accuracy, economy and dependability. Embodied in one unit are features which will eliminate double typing, manual key punching and verifying operations.

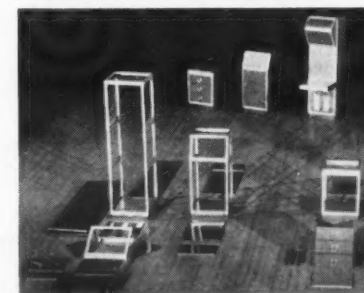
For more information, circle number 733 on the Reader Service Card.



"Erector set" cabinets

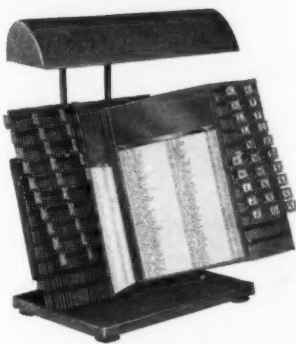
"Erector set" cabinets have been developed to house automation, electronic and instrumentation equipment.

The flexible system permits prospective purchasers to select from 75 mass-produced "building block" metal cabinet enclosures, composed of



MANAGEMENT METHODS

INSTANT REFERENCE with **ACME VISIBLE FLEXOLINE**



Year after year more businesses are buying ACME FLEXOLINE to save reference time on hundreds of different kinds of records.

Listings are typed on scored FLEXOLINE sheets, separated in strips and filed just where they belong. New strips are quickly inserted . . . obsolete strips removed . . . the list is always up to date.

FLEXOLINE record equipment provides for a few hundred, or hundreds of thousands of individual records. Let the Acme man show you how FLEXOLINE can serve you . . . or mail coupon for illustrated literature.

*District Offices and Representatives
in all Principal Cities*



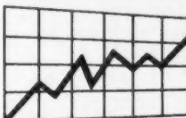
TELEPHONE SWITCHBOARD

NAME	PHONE	ADDRESS	CITY	STATE
Fulcher, L S	TR 1 1456	608 Cabel	Washington	DC
Goebel, Arthur M	HA 4 6732	1674 Grand	Seattle	Wash



CREDIT AUTHORIZATION

ADDRESS	NAME	AUTHORIZED	LIMIT
1722 Naples St	Davis, W L	Mr & Miss	C-3
4465 Kenmore Ave	Eggers, Joseph	Mr	A-2



PRICE RECORD

CAT NO	ITEM	UNIT	LIST	JBR	DLR	BRANCH
534-65	Tube, Glass 1/2"	Ft	.35	.20	.30	.18
534-66	Tube, Glass 1/2"	Ft	.40	.25	.35	.23



BADGE NUMBERS

NO	NAME	DEPT	LCKR	FL	BLDG
1654	Simner, Berney	169	1456	3	18
1655	Barber, Wm M	113	1273	2	29



SENIORITY LISTINGS

NAME	DEPT	JOB CLASS	PLANT	DEPT
Williamson, George N	45	Mach Opr	11-11-45	12-16-48
Juergenson, Walter	45	Mach Hlpr	11-23-46	12-23-48



BIN LOCATIONS

PART NO	NAME	BLDG	aisle	SECTION	BIN	PRICE
CX 138597	FUSE 2 Amp	1	F	12	1	1.15
CX 142303	BULB Lamp	2	A	8	3	1.50



SHIPPING

CONNECTICUT	
Branford	Wilson to Richmond c/o McLean
Centerbrook	Smith to Baltimore c/o Associated Transp.

ACME VISIBLE RECORDS, Inc., Crozet, Virginia

C-357

☐ We are interested in Acme Visible Equipment for _____ records.

KIND OF RECORD

☐ Have representative call. Date _____ Time _____

☐ Send us more information and literature on FLEXOLINE.

Company _____ Attention _____

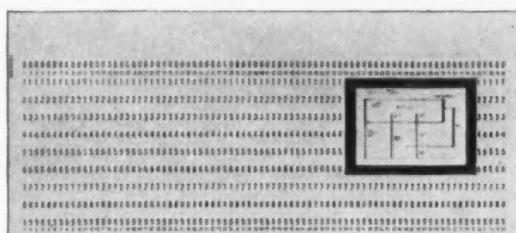
Address _____

City _____ Zone _____ State _____

(Circle number 635 for more information)

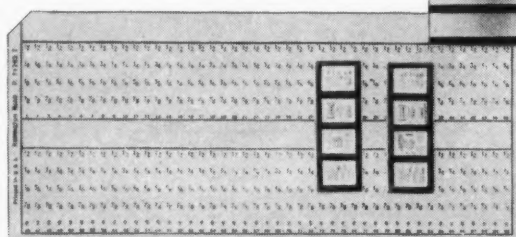
QUESTION?

Which of these Filmsort Cards is used for Personnel Records?*



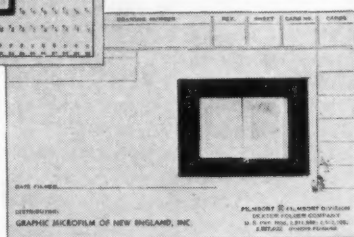
Tabulating card with D Aperture for 35mm

3 x 5 model E Jacket with 16mm chambers



3 x 5 card, D Aperture for 35mm film

Tabulating card with two E Apertures for 16mm film



* SEE ANSWER BELOW

FILMSORT is the original, most complete and most versatile group of systems for filing, sorting, reproduction and enlargement copying of microfilmed records of all types.

The Filmsort Aperture and Jacket cards shown here represent several different Filmsort systems for converting microfilm into an active record medium. Here are Aperture cards for engineering drawing control in large or small companies; a card for filing one to four documents on 16mm microfilm; a 16mm Jacket card for multiple document files.

*The 3x5 16mm Model E Filmsort Jacket is ideal for most personnel records. Up to 30 documents filmed

at a 22x reduction can easily be filed in a single card indexed alphabetically or numerically for incorporation in an active card file. The material is greatly condensed, yet readily available for reference in a card reader without removal from the Jacket. Enlargement prints can be made direct from the film if required—and it is simple and practical to add to the file at any time subsequent to the initial filming and microfilling process.

One—or more—of the Filmsort systems for unitized microfilm will answer your records problems. For complete information on Filmsort Unitized Microfilm Equipment and Supplies, see your local Filmsort distributor.



(Circle number 636 for more information)

DIVISION OF
DEXTER FOLDER COMPANY
A Division of Miehle Printing Press and Mfg. Co.
Pearl River, New York

sub-parts pre-fabricated by assembly line methods.

Working with as many as 125 sub-parts out of stock, finished cabinets in a wide variety of shapes, sizes and models can be constructed by screwing together different tops, backs, sides and fronts to the basic modular steel framework skeletons.

Industries already using the novel system include aviation, electronic, petro-chemical, heavy manufacturers employing automated equipment and the auto manufacturers.

For more information circle number 732 on the Reader Service Card.

New IBM Computer designed for scientific management

A large scale electronic computer specifically designed to help business management solve its problems scientifically has been developed by IBM Corp. The new system, IBM 709, is the first equipment of its capacity that can work with equal facility on both commercial and scientific or engineering calculations.

With the aid of analysts and mathematicians, the 709 will be able to pinpoint the best possible location for a new plant, and to work on other scientific management problems such as sales forecasting and distribution.

The new 709 data processing system utilizes instructions unlike any of those found in present-day stored program computers. Developed to provide greater programming flexibility, it includes conversion instructions which permit the machine to perform rapidly calculations on data prepared in number systems other than the 709's basic system of binary arithmetic.

The 709 systems will vary considerably as to the number of units used, but a typical system would lease for around \$56,000 a month or sell for about \$3 million.



Faster, more facile filing... smoother work flow... yours with


The new *Pro-File*^{*} by "Y and E"

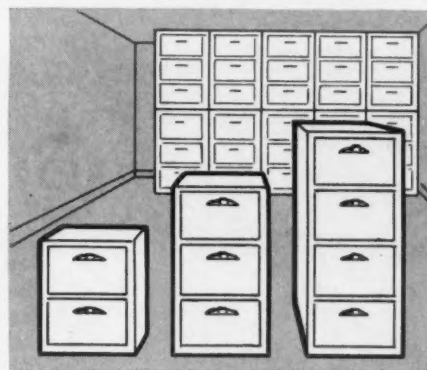
Now it's easy to lighten a task that saps away time and effort and dollars you can spend better on broadening your business.

Install the all-new *Pro-File*, a file whose compartments open *from the side*, making the filing and finding of records easier and less time consuming.

Clerks file from either side. Compartments can be left open for quick, efficient accessibility.

When shut, the *Pro-File* gives your valuable business records the protection and cleanliness only a closed cabinet can give.

Available for both private and general offices in Neutra-Tone Gray, Driftwood Tan, and Surf Green. Ask the  representative in your city for a demonstration.



Letter size available in 2, 3 and 4 compartments—legal size in 2 and 3 compartments—Minimum compartment projection keeps center of gravity inside cabinet—makes stacking safe and efficient for maximum utilization of floor space.

YAWMAN AND ERBE MFG. CO.

1017 Jay Street, Rochester 3, N. Y.

^{*}Patented

(Circle number 637 for more information)

A winning entry in MM's Third Annual
Best Place to Work Competition shows —

How to plan simplicity in your

WINNER: *Best clerical work center . . .*
Lutheran Brotherhood Minneapolis, Minn.

DESIGNER:
Paul J. Ocken and Associates



FIGURE 1: Policy Filing Section has specially designed desks, counter-height cabinets.



In selecting a "best" clerical work center, the judges of MM's Third Annual Best Place to Work Awards were strongly influenced by the over-all design and layout of the Lutheran Brotherhood's entire home office building. The two specific work centers featured on these pages, however, are typical of the careful attention to detail that characterizes the whole.

The Policy Filing Section (Figure 1) is roughly comparable to the "central files" of the average large firm. Since the entire building is air-conditioned, with fixed win-

FIGURE 2: Air-conditioning and fixed windows eliminate dust, permit open-shelf filing.

clerical work place



FIGURE 3: Cooped up impression is avoided in Money Room.

dows, there is virtually no dust—hence the open-shelf filing technique is feasible (Figure 2). Adjacent to the open files is a row of specially-designed desks that are used by sorting clerks. Next to the sorting stations are banks of filing cabinets for records other than policies.

The "Money Room"

One special clerical area, the Money Room, not at all unique to insurance companies, is the place where incoming premium remittances are opened and sorted (Figure 3). It was necessary to segregate the employees in this area into a small space without creating a "cooped up" impression. Moreover,

close proximity of workers was essential since items are passed back and forth between them during the sorting operation. Specifically designed furniture was needed since it was felt that a continuous, crack-free working surface was the only way to avoid possible loss of small slips of paper (prior to this solution, desks butted end-to-end had proved undesirable since checks and money often slipped between them). The machine in the rear center of the area is a microfilm unit.

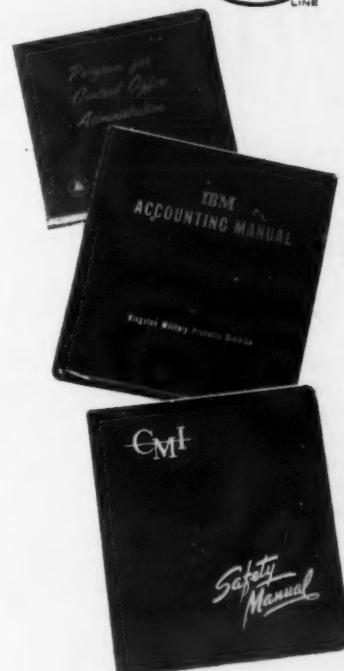
The Money Room is separated from adjacent areas by transparent partitions that "open-up" what might otherwise have been a box-like room. m/m



Clever Move

You must have seen

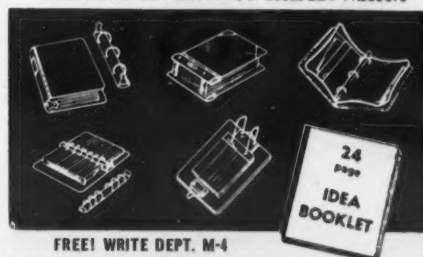
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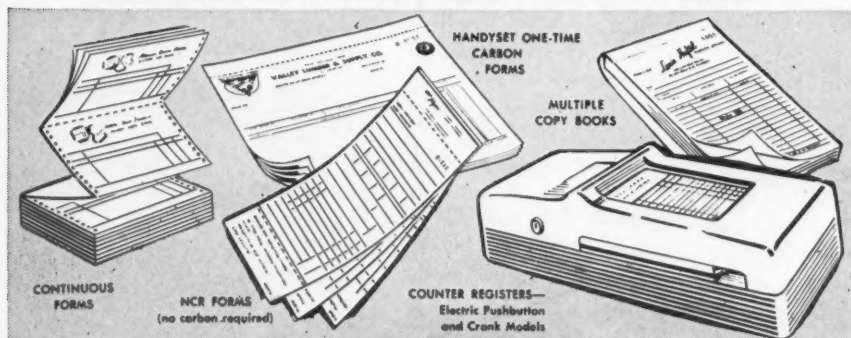
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thought starters

Thought Starters deal with "practical solutions to administrative problems." The Editor invites contributions—which are paid for at our normal space rates.

ADVERTISING

Making institutional advertising pay off

Although the value of so-called institutional advertising is doubted by many companies, Shell Oil Co. has demonstrated its public relations value. A series of safety ads proved that public service can bring tangible rewards. Their series of ads won public recognition and acclaim from civic groups, schools, and other organizations throughout the country.

Two examples show the kind of acceptance the ads received: A Detroit judge ordered traffic offenders to read the series of ads, and the New York school system outlined a plan to use the ads in training 40,000 student drivers.

The ads were designed to promote highway safety. They consisted of a series of quizzes in which readers could test themselves. Subjects covered attitudes toward various traffic situations, knowledge of the road, reaction time, visual limitations, and other pertinent factors (Figures 1 and 2).

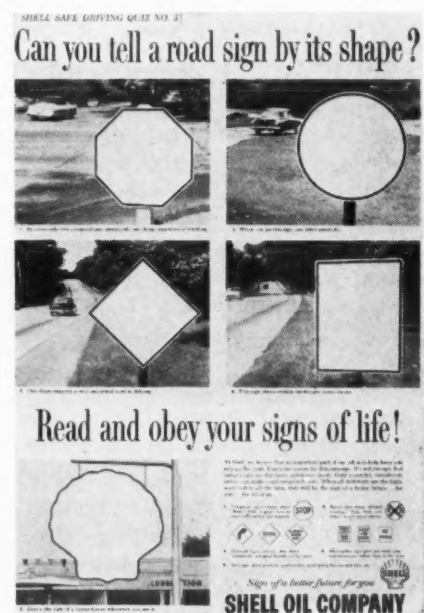


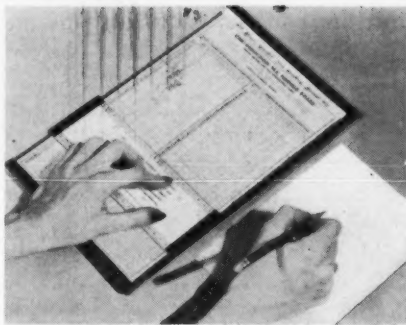
Figure 1

MANAGEMENT METHODS

and new Social Security (FICA) deductions at the 1957 rate of 2½%.

A single deduction that combines Withholding Tax and FICA is shown on the One-Deduction Board.

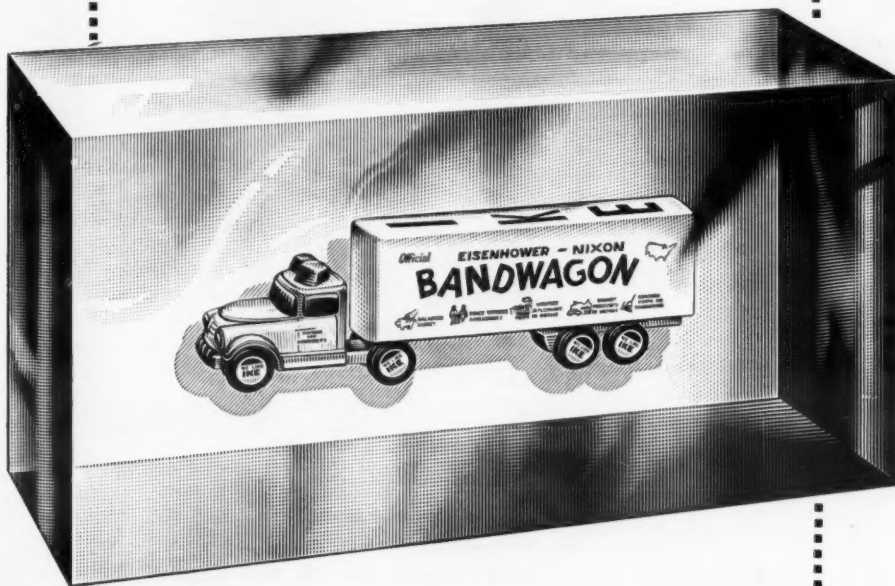
Both are said to be easier to work with than government tax tables. Constructed of a masonite base, the 7½" x 12" boards utilize a slide guide that quickly lines up the proper tax deduction for any wage amount. No further computation is required.



The printed tables can be replaced simply whenever taxes change.

For more information, circle number 729 on the Reader Service Card.

THE INAUGURAL GIFT



When the problem was posed: "What to give President Eisenhower for his desk as a symbol of his election victory?" — PLASTALLIONS were the logical choice. A perfect miniature of the Eisenhower Bandwagon, reduced from 60 feet to 2½ inches, was embedded in Lucite.

Have you a product, anniversary, or big occasion story to tell? One that you want to get on a key executive's desk *permanently*? Plastallions are your answer.

Send for our FREE 30-page catalogue illustrating a wide variety of PLASTALLIONS with prices in any quantity.

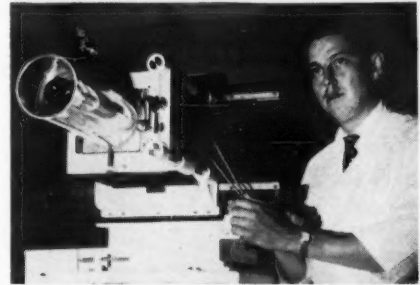
CREATIVE PLASTICS CORP.
STONY BROOK, LONG ISLAND, NEW YORK

(Circle number 641 for more information)

ENGINEERING

Architectural drawings 'improved' by photography

A new 105mm system called Micro-Master successfully duplicates engineering and architectural drawings. Second originals made by this method are consistently better than the true originals, and approximately 75% improvement without new artwork has been demonstrated in the restoration of soiled or worn tracings.



When tracings are to be reproduced, they are mounted on a vacuum easel and photographed to pick up maximum detail. The weakest line image is captured without respect to background dirt. Soil and mottle are then clipped out of the projected image with exposures. When the 105mm negative has been developed and dried, it provides a perfect image of all line work entirely free from pinholes.

For further information circle number 736 on the Reader Service Card.

FORMS

New forms instructions cuts time 84%

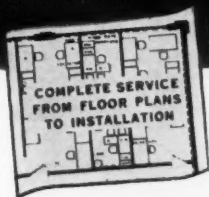
by B. T. Haffey
The Ramo-Wooldridge Corp.

Formerly, when we sent instructions to employees on how to fill in a new form, it required four pages and over 500 words of explanation. Now it takes only one page and less than 100 words. The result is more acceptance, more compliance and an 84% cut in learning time and effort.

Under the old method, when a new form was designed, a sample copy went to everyone concerned, together with pages of detailed instructions on each entry to be made, and routing procedure. Many of the instructions were obvious and unnecessary. Further, it was awkward for the employee to keep



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"More people are doing a better job, and have more room, in half the space we thought we needed."

The task of organizing the New York offices of one of the nation's largest chemical corporations is typical of assignments handled by Art Metal's planning engineers. Tangible results reported by this firm*, quoted above, are the outcome of a service to business based on the functional design and integration of office equipment with work flow needs. Desks, chairs, files and related furniture of the finest quality are thus made to repay the cost of installation—*quickly*—in savings of labor, time and space...Look up your Art Metal representative in the Yellow Pages...or write Art Metal Construction Company, Jamestown 4, New York.

(FOR IDEAS YOU CAN USE, check any of the following helpful manuals and booklets:

- | | |
|---|---|
| <p>OFFICE PLANNING AIDS</p> <ul style="list-style-type: none"> <input type="checkbox"/> Office Standards and Planning <input type="checkbox"/> Things to be Done When You Move or Rearrange Your Office <input type="checkbox"/> Office Planning Kit <input type="checkbox"/> Manual of Desk Drawer Layout | <p>GUIDES TO EQUIPMENT</p> <ul style="list-style-type: none"> <input type="checkbox"/> Executive and General Office Desks <input type="checkbox"/> Correct Seating Chairs <input type="checkbox"/> Filing Equipment <input type="checkbox"/> El-Unit Modular Offices <input type="checkbox"/> Postindex Visible Index Files |
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...making offices finer for business since 1888

* Name on request
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National sales and service through branches and dealers in more than 800 cities.

(Circle number 642 for more information)



Get rid of the "ghosts" on your payroll

One of the most common forms of embezzlement is payroll padding. Adding fictitious names to payrolls, overpayments, falsifying time sheets and records—all these and dozens of other types of payroll plunder can be completely controlled.

The Todd Company—one of the country's pioneers in developing safe and efficient payroll systems—has published a booklet outlining 44 ways to protect your company's bank account. Sections 39, 40 and 41 deal with payroll padding and controls. Other sections, equally important, deal with dividend disbursements and check paper safeguards.

Write now—on your own letterhead—for the free but invaluable booklet "Disbursement Methods—their use and misuse."



THE TODD COMPANY, INC.

Subsidiary of BURROUGHS CORPORATION

ROCHESTER 3, NEW YORK

SALES OFFICES IN PRINCIPAL CITIES.

(Circle number 643 for more information)

turning pages back and forth to see where on the form the instructions applied.

Now only a single instruction sheet is used, with comments covering only items subject to possible misinterpretation (*see illustration*). The arrows add emphasis without obscuring the form itself.

A simplified flow chart accompanies the specimen form on the same sheet, to explain at a glance how routing should be handled.

DICTATION

New battery dictation machine works anywhere

All the convenience and performance features of the most modern office dictation units have been engineered into an all-transistor, battery-powered portable dictation machine that works anywhere, with or without electrical outlet. Called the Peirce Secretary, this new, book-size, 4½-pound dic-



tating machine is completely compatible with office transcribing machines.

The Peirce Secretary is a complete dictation unit. It incorporates

MANAGEMENT METHODS

from order

to invoice...

WRITTEN JUST ONCE

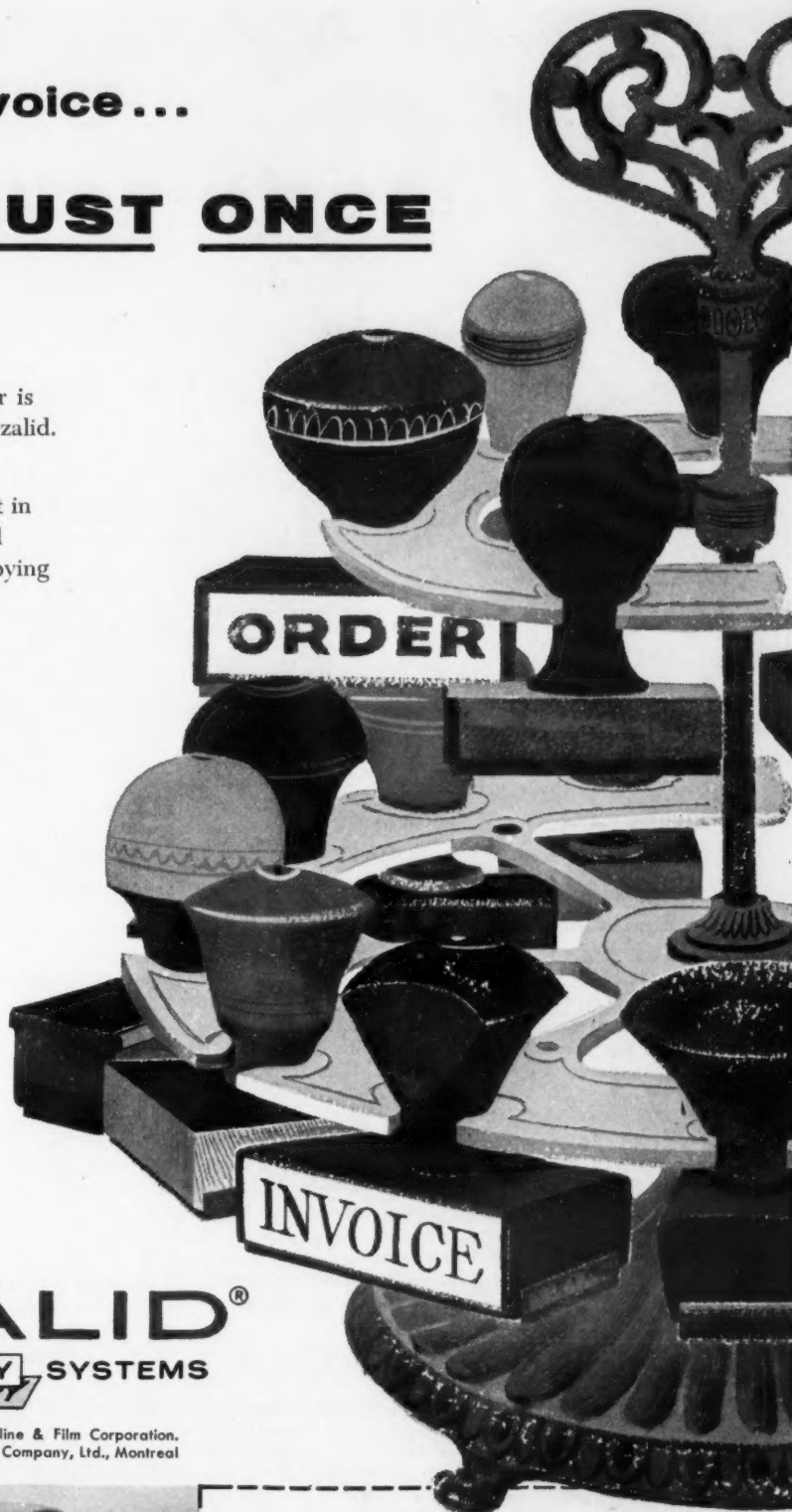
From first step to final record, all the paperwork you require to process an order is reproduced from *just one writing*—with Ozalid.

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Ozalid ends wasteful duplication of paperwork throughout your business. In every department, Ozalid replaces costly writing or typing with inexpensive *Direct Copying*.

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Please send more information on how Ozalid Direct Copying can help us with our:

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|---|-------------------------------------|--------------------------------------|
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Firm _____
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A Modern Electric Duplicator at a Moderate Price!...



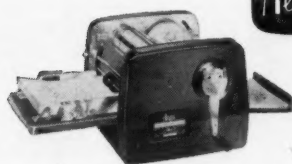
now Heyer offers push-button
duplicating at little more
than the price of some
hand-operated machines

Heyer MODEL 76 *Mark II*
CONQUEROR
SPIRIT DUPLICATOR

\$299⁵⁰
Plus Tax

Every office duplicating job — bulletins, form letters, post cards, special office forms, etc.—can be produced much more easily and inexpensively on the new Model 76 Mark II automatic electric spirit duplicator. At the touch of a button, it prints 110 clear, crisp copies per minute (up to 8½ by 14 in. size), in 1 to 5 colors . . . at a fraction of a cent per copy. Its constant speed produces better and more uniform copies. Most important . . . there's no effort on the operator's part, for this new Conqueror runs without watching and even turns off automatically. You can pay much more if you wish, but the Model 76 offers all this . . . at a price that can't be matched!

More than 53 years of duplicating experience has enabled Heyer to add new engineering improvements to the Model 76 that make it feature for feature the biggest value in duplicating today. These features include Adjustable Pressure Control, Copy Positioner, re-settable Copy Counter, Built-in Tank with Visible Fluid Supply, Adjustable Fluid Control, and Paper Stackers. A brand-new Feed Drive Mechanism which works only in a forward motion eliminates the lurch found in old-fashioned reciprocal drives. Quiet Nylon Gears need no lubrication. The Model 76 conquers every duplicating job with speed, ease and neatness never before experienced.



Heyer MODEL 70
Mark II **CONQUEROR**

If a hand-operated duplicator fits your requirements, you can't find a better buy than the Model 70 Mark II Conqueror. It is basically the same as the Model 76 except for electric drive and controls. The Model 70 prints 110 copies per minute of anything typed, written or drawn on the master . . . in 1 to 5 colors at once.

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☐ Please arrange a demonstration.

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playback and review at any dictation point as often as desired; full context listening with end-of-letter and instruction marking on index slip. The magnetic belt dictation medium holds 15 minutes of dictation, and is transcribed on standard office units. Belts may be mailed in ordinary envelopes, filed or re-used thousands of times.

Incorporating the magnetic, automatic-erase dictation system, the machine insures the production of clear, errorless dictation. The user's voice alone simultaneously wipes out misstatements and inserts corrections or changes.

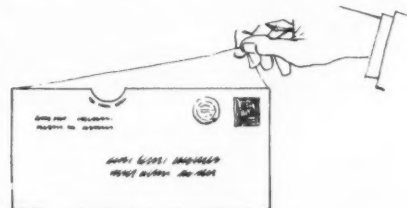
The Peirce Secretary opens new opportunities for travelling business and professional people in on-the-spot handling of everything from simple correspondence to complicated reports.

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ADVERTISING

Zip-opener adds zest to sales messages

An effective and inexpensive way to add impact to your mailing is through use of the attention-getting zip-opener. A built-in opening device for envelopes, the zip-opener eliminates use of a letter opener and provides the "opening insur-

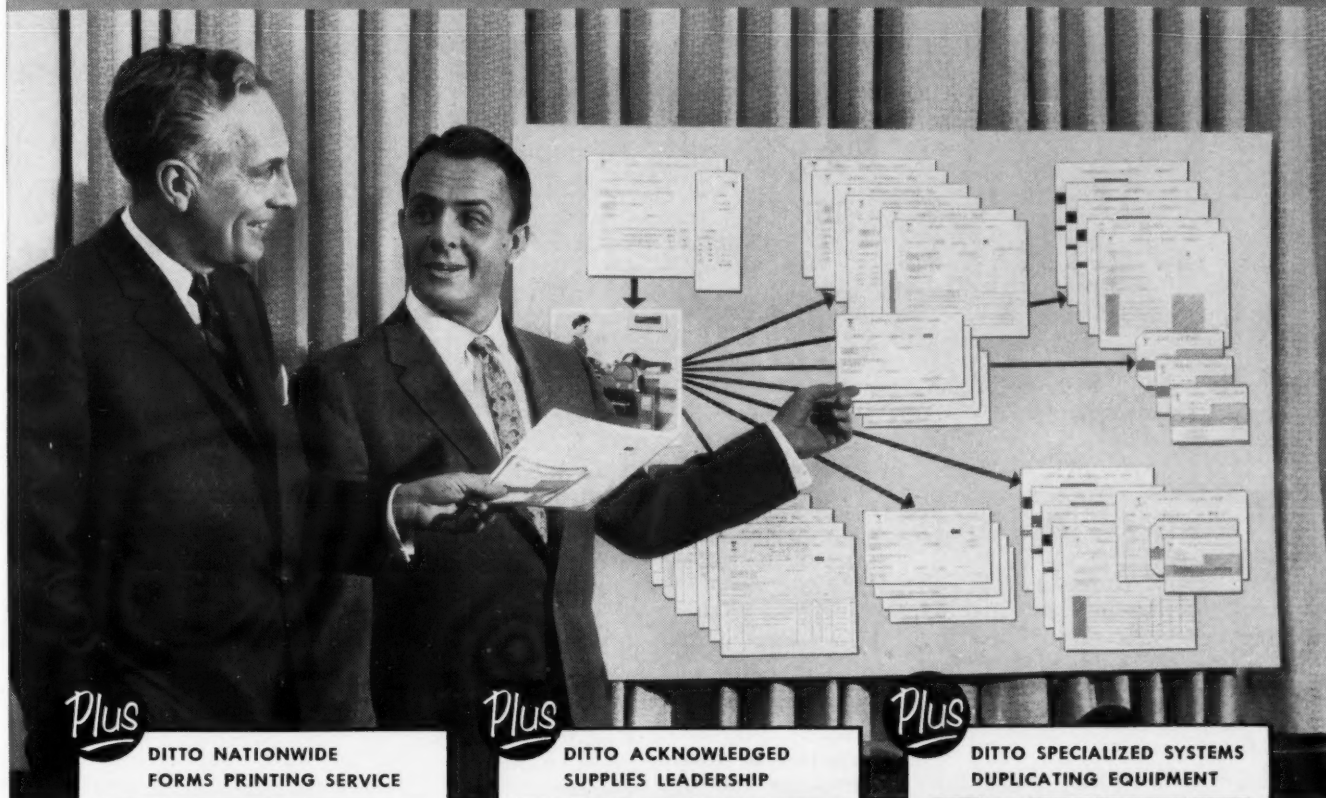


ance" essential to the success of a direct mail promotion.

Attach a pull-tag to the end of the zip-opener and you have a sure-fire method for getting your message across. Effective ways for using the combination zip-opener and pull-tag include sales promotion, announcement of a new product, dealer cooperative mailings.

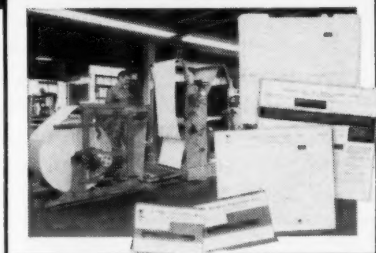
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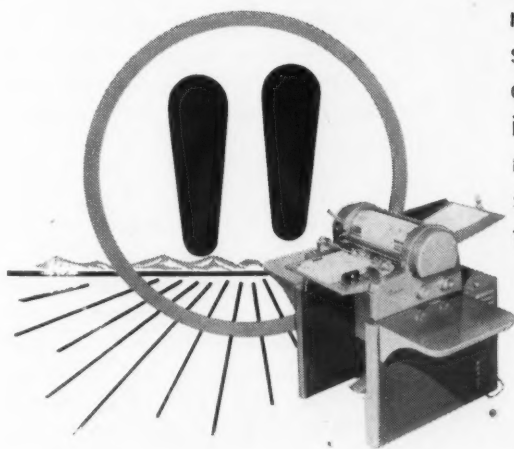
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Some firms — big and small — spend hundreds of thousands of dollars each year on public relations. Others have learned to live with a tight budget and still get good results. If you look at your PR budget in the light of facts presented here, chances are you can strengthen the return from your investment.

How much should public relations co

By Bill Ruder and David Finn

Ruder & Finn, Inc., New York.

There's no getting around the fact that public relations costs money.

For example, viewed realistically the cost of planning, researching, writing, checking-out, processing, and mailing a news release may run into the hundreds of dollars when all time and salary costs are included.

Calling in a good photographer to make some pictures to illustrate a story for a trade paper can easily cost you some additional hundreds of dollars.

If you are scheduled to give a speech before an important association, you'll consume expensive time in writing it, even if you don't call in public relations specialists to do the research work.

Despite these facts, it is increasingly clear that public relations has become a necessary—and usually profitable—cost of doing business. This is no idle claim on our part. Consider this fact: recent figures show that an estimated 60% of American business and industrial firms today are spending money on formalized public relations programs of one kind or another. They are spending anywhere from a few hundred to tens of thousands of dollars each year on their public relations efforts. Why? Because they have found that it is no longer adequate to simply *be* a sound and sincere business; today, more than ever before, a company's success depends on ability to make its products and stature known.

Problems of budget setting

How can you best determine the size of the budget necessary to fulfill this job?

The real problem in setting a PR budget is that public relations needs vary widely. They vary among your company and others, and they also vary within your company from one time to another. PR costs can be compared to doctor bills: they can be kept at an almost insignificant minimum when you are well, but they may skyrocket when you become seriously ill.

The best insurance against the need for huge public relations expenditures is to underwrite an adequate and carefully planned public relations program on a *continuing* basis. Such insurance will not cover your costs if you find it necessary to pull out the stops in order to solve some unusual problem. But it will do something better: it will greatly reduce the chances that such problems will occur in the first place, *i.e.*, it will help maintain your company's health. Further, it will help you take advantage of unexpected opportunities to improve your company's public relations "health" as these opportunities arise.

Key costs: PR specialists

What are the specific costs of public relations?

The biggest expense is time—primarily the time of a qualified pub-

lic relations man, whether you use someone on your own staff or hire outside counsel. On the average, about 65% of the public relations budget goes to cover the time of the man or men you are paying to do the job.

Other costs

This figure points up the fact that the time of specialists is the key cost of public relations. Sometimes the other costs are insignificant—but sometimes they are not. For example, an industrial firm with an annual sales volume of \$8 million last year sent out a total of 57 news releases, most of which were given extensive distribution; total cost of processing and mailing these releases was \$2300.

Here are some other specific examples of what various public relations items cost:

Television films: Many firms are now turning out short movies about themselves and distributing these films to television stations. The most common practice is to provide a silent film supplemented by a script to be read by the newscaster or commentator. The cost of producing and distributing 100 prints of a three-minute silent film is approximately \$3,500.

Press conference: If you have a message that you want to deliver face-to-face to newspaper and magazine reporters, the cost of telegrams to invite the press, press kits, visual material to use in your presentation, as well as other various

cost?

requirements, may come to \$500 or \$1,000. If the press conference includes cocktails and luncheon, using favorable hotel facilities, the budget will be in the \$1,500 to \$3,000 bracket.

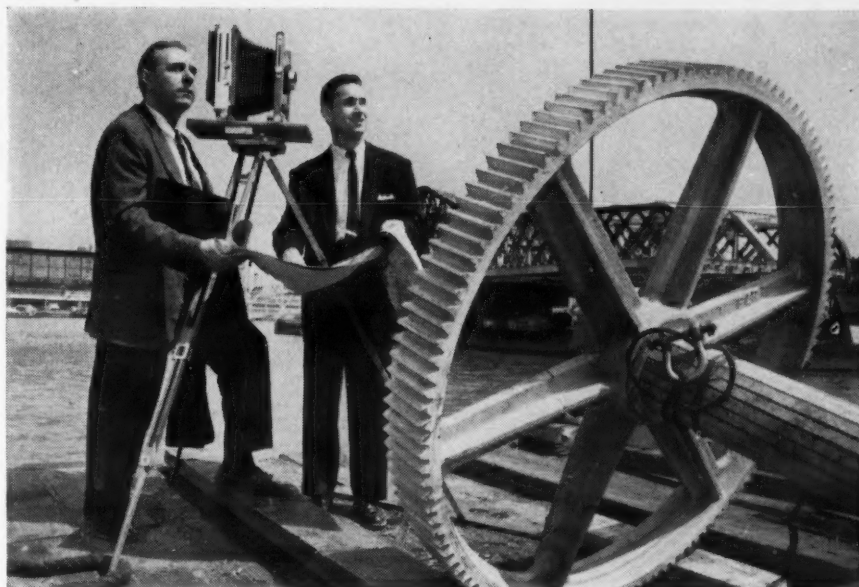
Photographs: A high quality portrait photograph for an important executive costs a minimum of \$50—plus additional costs for a quantity of prints. Less important press portraits can be obtained for approximately \$25.

Booklets: Despite the increase in the number of communications methods now available, booklets and other printed material are still considered the work-horse of public relations. Depending on the need, a printed piece for public relations use may consist of a simple black and white folder or a heavily illustrated, multicolor "show-piece." Assuming the average, however, a 16-page, two-color booklet, with a minimum quantity of 10,000 copies can be produced for about \$3,000.

Clipping service: The most commonly used method of determining press coverage of company news is a clipping service. Such a service, covering the publications in your industry, general business publications and major newspapers, can be obtained for about \$15 or \$20 a month depending to some extent on the number of clippings.

Costs too high?

Are public relations costs too high? Many business executives wonder about this question, and



For Your Plant or Business Pictures.

High Speed Du Pont "Superior" Press Film captures every detail—rain or shine

Partners Mal Gurian and Howard Schrank of Mal Gurian Associates are specialists in construction photography. Mr. Gurian points out, "We are not concerned with 'pretty pictures.' We have to record every detail of soil conditions, rock formation, corrosion, and construction progress—regardless of lighting conditions or weather.

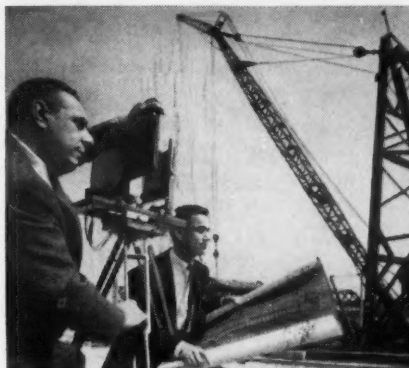
"To do this," continues Mr. Gurian, "we need a fine-grain, high-speed emulsion with good tonal gradation. Superior® press film gives us all these qualities, plus extremely wide exposure and development latitudes. It can't be beat for holding clear, unblocked highlights, even when we expose for shadow areas."

But good negatives are only part of the job. That's why Gurian Associates have been using Du Pont paper ever since they started. "We use High Speed 'Varigam' for almost all our prints. For negatives of normal contrast, we can print without filters twice as fast as with other projection papers, and even with filters, it's 25 per cent faster.

"The variable contrast characteristics

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Howard Schrank (left) and Mal Gurian prepare to photograph construction site. Mr. Gurian says, "We visit over 50 locations a week and need a film we can count on; 'Superior' Press gives complete dependability!"

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Now Hammermill Ledger contains Neutracer[®] pulp. This pulp, exclusive with Hammermill, is made from northern hardwoods. Blended with other fine papermaking pulps, Neutracer gives Hammermill Ledger a better typing, writing and ruling surface—a more level, velvety surface for crisper ruling and printing. Neater folding, too.

Hammermill Ledger is also available in a standard "Ledger" finish that makes for neat, readable pen and ink entries. You choose from outstandingly clean, low-gloss shades of blue-white, buff and green tint.

Why not write now on your business letterhead for a sample book of Hammermill Ledger. You'll see for yourself—and so will your bookkeepers—how Hammermill Ledger helps make it easier to keep records that are more legible, that last longer. Hammermill Paper Company, 1499 East Lake Road, Erie 6, Pennsylvania.

...yet **HAMMERMILL** costs no
LEDGER more

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(Circle number 648 for more information)

Public Relations

some are strong in their belief that PR costs are indeed too high. It is an unquestionable fact that a substantial proportion of public relations programs are not worth the money spent. But this is not because public relations costs are too high. Rather, it is because the methods and tools of public relations are not being properly applied. In fact, in many cases where public relations is not doing its job, it is because the costs are not high enough! Cut-rate public relations just does not pay.

How to set your PR budget

As with any other phase of company operation, your company's public relations program should be based on a predetermined budget. Many top managements use their own pet methods to determine the size of this budget.

One not-so-uncommon method is to squint the eyes and to take an educated guess—or even a stab in the dark.

Another is to base the PR budget on a certain percentage of gross sales.

Some firms determine the figure on the basis of how much is left after the more essential and "more important" budgets have been fixed.

Still another approach is to settle on about half of what the PR director or the PR counsel recommends on the grounds that he probably recommended more than he expects, and anyway, he can replace imagination for dollars.

Seldom are these methods adequate. For example, take the percentage-volume technique. We know of two firms, one in the electrical appliance industry doing \$1 million in annual sales, the other a manufacturer of kitchen appliances with a volume of \$90 million. Both are spending exactly the same amount each year for public relations. Both are getting good results. Obviously, if both programs were based on the same percentage of sales volume, the second firm would be spending 90 times as much as it is now—needlessly.

Your particular firm has its own environment of specific public relations needs, and your public re-

TYPICAL PR COSTS



TV Movies

\$3500



Press Conferences

\$500-3000



Executive Photos

\$25-50



Booklets & Brochures

\$3000 (16 pp 2 colors)



Clipping Services

\$15-20 per month

lations budget should be based on a comprehensive analysis of these needs. Experience shows that you cannot successfully short circuit this comprehensive budget-setting analysis if your PR program is to provide optimum return. In most cases, your PR specialist, working in conjunction with top management, is best qualified to guide this analysis.

Here are the four steps that the analysis should involve:

1. Visualize and crystallize your long range public relations goals (see "How to develop a public relations program," MM, Sept. '56).

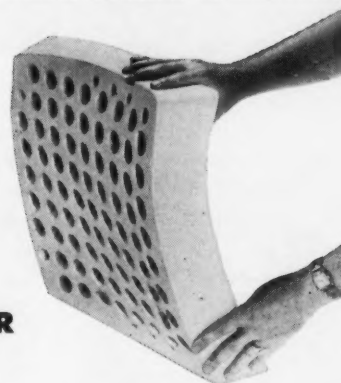
2. In terms of your long range goals, determine what immediate problems public relations can help solve, or what advancements it can help your company make.

3. Create a program of public relations activities that will solve the most important of the immediate problems and help you realize the most important opportunities.

4. Finally, attach a realistic and

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The seat is the first point of comfort in a chair and in the Harter C-1500 you find that it is deep, molded foam rubber. *Not* just a thin sheet of rubber; *not* bonded scraps, but virgin foam rubber all the way through.



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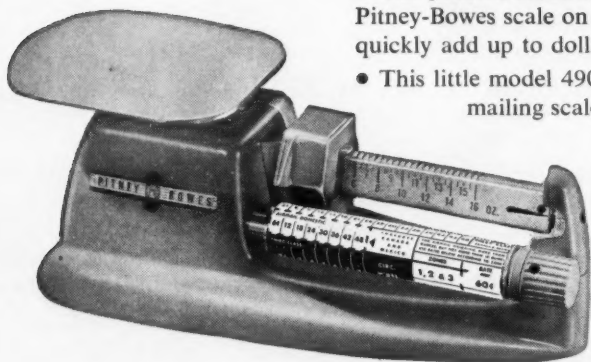
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Public Relations

flexible price tag to the program you have mapped out.

Controlling PR with budget

A properly planned budget helps top management maintain control over the public relations program. Bear in mind this point: your PR staff or agency will tend to spend more time and effort on those aspects of the program for which you have allotted the largest portions of the PR budget. It is normal to assume that if management assigns more money to one phase of the program than to others, then management considers this one phase more important than the rest. Often, this assumption is erroneously made; it may not be management's purpose to emphasize one aspect over another, but simply to recognize the fact that some PR activities cost more than others, regardless of their relative importance.

The best way to avoid this problem is to avoid breaking down the PR budget on the basis of methods to be used, *e.g.*, so much for printed material, so much for displays, etc. Instead, base the budget breakdown on *functions*, such as product publicity, financial relations, and community relations. In

TYPICAL PR FEE BASIS

Package Fee

Retainer covers time and expenses. Caution: management or counsel may suffer.

Fee Plus Expenses

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Management Methods

this way, the same public relations methods will undoubtedly overlap into the various areas, but the budget will give a fair approximation of where the emphasis should lie, and serve as a useful management control.

Paying your PR counsel

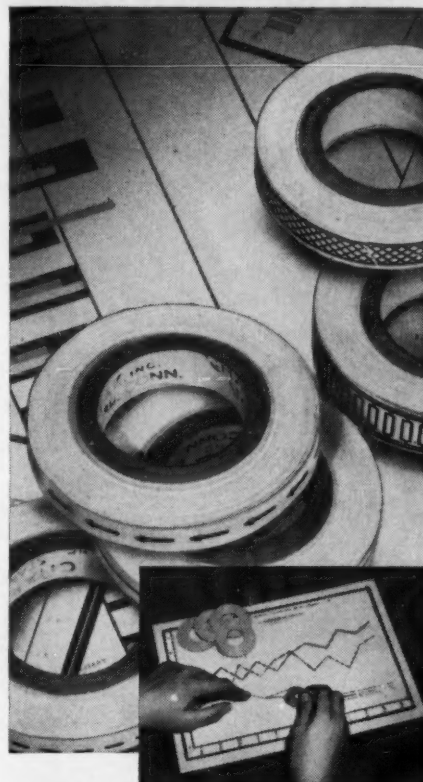
Management can also control public relations through the method it selects for paying its PR counsel. Three basic payment arrangements are in general use. Each arrangement has its own advantages under certain conditions. All three of the payment methods are predicated on the understanding that a PR counsel is paid, not for the results he obtains, but for the time he devotes to a professional, conscientious and confident effort to get these results. Seldom will he—or seldom can he—guarantee results in advance. The following are the three most common methods used to pay PR counsel:

Package fee: This fee usually covers both the counsel's time and his expenses. It usually consists of a monthly retainer. Under this arrangement, the counsel must pay all of the major and minor expenses involved in the public relations program. Thus, he takes all of the risk, for if the program gets out of hand and additional expenses are necessary, he can very easily lose money. On the other hand, management may be the one who suffers under this arrangement since the PR counsel may be tempted to keep the program at a minimum, in order that as much as possible of his retainer can be translated into profit.

Fee plus expenses: Under this arrangement, a monthly retainer is usually paid to cover the PR counsel's time only. Additional expenses which the counsel assumes in conducting the PR program (such as buying, mimeographing, printing, mailing, etc.) are then billed to the company, usually with a 15% markup to cover administrative and overhead costs.

Time plus expenses: Here a per diem or hourly rate is established for the counsel's time in handling the company's public relations program. These time charges are billed

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to the company on a monthly basis or as they occur. In addition, the counsel submits his marked up bill for all other expenses in the program. Sometimes, a flat retainer fee and per diem charges are combined. Under normal circumstances, the per diem is considered to be most fair to both client and counsel. The difficulty comes in, however, when an inflexible budget has been set for the program.

Is your budget on target?

Seldom will you be in a position to eliminate all the guesswork from the planning, budgeting and evaluating of your company's public relations program. The reason for this is that it is impossible to accurately measure good will in terms of dollars and cents. There are, however, internal signals that you should watch for as indications that your public relations budget is out of line with your public relations needs.

First, a "yes" answer to any of the following questions may indicate that your budget is too large: Does friction develop quickly between you and your PR director or PR counsel? Are you anxiously awaiting "results" that don't seem to be forthcoming? Do you become impatient with your PR man when he tries to explain the long range nature of his work? Do you regularly ask yourself whether your public relations effort is worth the money it is costing you, without being sure of the answer?

Secondly, a "yes" answer to any of the following questions probably indicates that your budget is too small: Do you consider public relations a very unimportant, splinter type of activity? Does top management have little or no contact with the PR program? Is your PR man left out of meetings devoted to important management decisions, marketing plans, and so on? Do you refrain from questioning your public relations budget because you consider it to be too insignificant to require your time?

In short, your public relations budget should be large enough to warrant top management attention, but not so large as to become a company or management burden.

m/m

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Sizzle of Your Site

(Continued from page 36)

ior College, Mrs. Beverly Bennett, who discussed the new location from the woman's point of view. Sandwiched between these short talks were travelogue-type movies about the St. Petersburg area.

A second, similar meeting was held in December at which additional topics were covered and individual questions answered.

Group junkets: Both the booklet and the meetings were unusually effective in stimulating excitement for the move among the selected employees. But company officials decided to go still one step further and give their people an opportunity to see for themselves what the living conditions were like in their new location. Three-day junkets to Florida were arranged for representative members of the group that was to be transferred. Six or seven couples at a time were flown to Florida in the company's own DC-3. They were installed in a beach-front hotel, banqueted, then given tours of all the major local attractions.

When these people returned to Minneapolis, they spread the word concerning what they had seen.

A further step in the program has been the fact that Mrs. Bennett, the college president's wife, who spoke at the first employee meeting in Minneapolis, has been retained by the company to assist transferred employees with any problems that arise during their adjustment period in St. Petersburg. The result is that now, as more and more Minneapolis personnel arrive in Florida to work in the company's temporary offices there, the problems and complications of moving are kept to a bare minimum.

Few companies, particularly smaller ones, are in a position to carry out the kind of site selling program that Minneapolis-Honeywell has conducted. Nonetheless, this company's example demonstrates that the favorable aspects of your plant location—whether it is in Pennsylvania's rolling Pocono mountains or in a boom town in Texas or on a country road in Iowa—can be used as a major appeal in getting and keeping scarce personnel. m/m

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Operations Research

(Continued from page 39)

Step 9. You reach the final stage when the minimum number of shaded lines necessary to include all zeros in a table equals the number of rows we started with in Table I. Thus, in our example, Table IV is the final table and we circle five squares containing zeros so that each row has only one circled square, and each column has only one circled square.

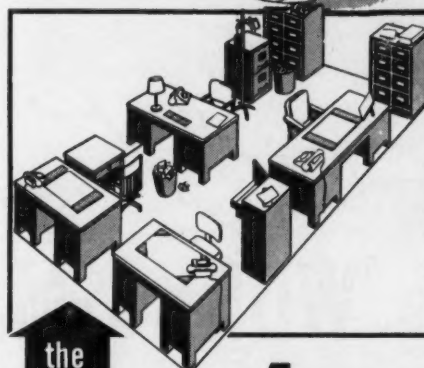
The circled squares in Table IV show the minimum cost assignment, which is also shown, for the sake of clarity, in the first two columns of Table V. (How close was your preliminary guess?) The third column of Table V shows the cost associated with each allocation and is filled in by reference to Table I. The total cost of the assignment, sum costs entered in column 3 of Table V, is \$1,300.

Table V also shows the maximum cost assignment (costing \$2,502), which is the worst assignment from our point of view. Since in this example five flights are to be assigned, there can be 120 possible assignments. The cost associated with each of these assignments will lie anywhere between \$1,300 and \$2,502. Hence any method that does not insure our obtaining the minimum cost assignment will lead to an assignment costing between \$1,300 and \$2,502.

Flood's technique can solve maximum profit assignment problems as well as minimum cost assignment problems provided data is available. m/m

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- (1) Flood, Merrill M., "The Traveling Salesman Problem," *Operations Research*, Vol. 4, No. 1, Feb. 1956, pp. 61-75 (Operations Research Society of America, Mount Royal and Guilford Ave., Baltimore 2, Md.) Also published in *Operations Research for Management*, Vol. II, The John Hopkins Press, Baltimore, Md., 1956, pp. 340-357.
- (2) Vaswani, R., "The Assignment Problem," Chap. 12 in *Introduction to Operations Research*, C. W. Churchman, R. L. Ackoff, and E. L. Arnoff (eds.), John Wiley & Sons, Inc., New York, 1957.
- (3) Vaswani, R., "The Aircraft Assignment Problem," *Aeronautical Engineering Review*, Feb. 1957 (The Institute of Aeronautical Sciences, 2 East 64th Street, New York 21).
- (4) Vaswani, R., "Intra-City Trailer Movement," *Operational Research Quarterly*, Vol. 7, No. 3, Sept. 1956, pp. 91-96 (11 Park Lane, London, W. 1, England).



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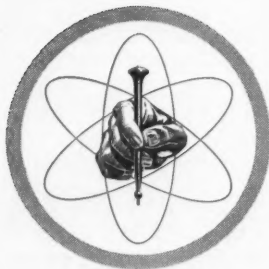
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MANAGEMENT METHODS

PROFILE OF A NEW KIND OF MANAGER

(continued from page 49)

farm jobs they now have. So the farm owners are fighting the idea. If a company does go in there with a plant, it will do so with two strikes against it, because of the antagonistic attitude on the part of the farm owners.

Q. Do you feel that it's a general rule that an agricultural area is a poor bet for new industry?

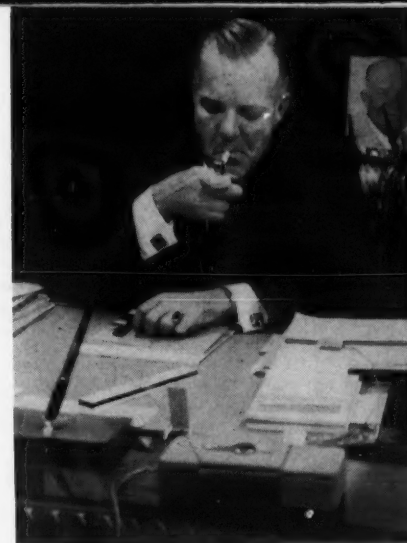
A. Not at all. This is an isolated example. Throughout many parts of the South, for example, the picture is quite different. Mississippi is a good farming territory, but for years the state has been endeavoring to balance agriculture with industry; the same applies now in Georgia, Kentucky and other southern states. And it applies in other agricultural sections of the country. Getting back to California, we found an excellent plant site there in Porterville. The peo-

ple in the town had set up an industrial development program and were out seeking new industry to balance off the agricultural economy. When we investigated the location, we found that the merchants and tradespeople there were aware of the stabilizing effect an industrial plant would have on the economy. As a result, we're now completing a modern, air-conditioned plant right in the middle of an agricultural area.

Q. Have you found that there are some industrial areas as well as some agricultural areas that are not interested in attracting new industry?

A. Oh, yes. I could cite many examples. I know of one industrial section largely dominated by refineries. An auto manufacturer moved in and put up a plant with some heavy presses in it that thump

on the ground a little bit—they make some noise. The company is getting all sorts of complaints about that. The reason is that the people in the area weren't particularly interested in having a new industry come in. Their economy was already good and it was refinery oriented. The people viewed the auto plant as an intrusion. Now, if that plant had been put up in another area, where the citizenry was really anxious to at-



COMMUNITY FINANCE: how Rockwell uses it

Here is a specific example of how Rockwell uses the community finance method.

In Russellville, Kentucky. (pop. 5,000), the Chamber of Commerce invited Rockwell to consider the town as a new plant site. Once Rockwell displayed interest, the town began to organize an industrial development corporation. At a town meeting it was announced that 10-year, 4½% bonds would be

issued to raise part of the capital for Rockwell's intended plant. Within five minutes, \$105,000 was subscribed, and within 48 hours, \$300,000 was raised—\$50,000 over the initial goal. In all, \$350,000 was invested by about 200 people (maximum individual investment: \$10,000).

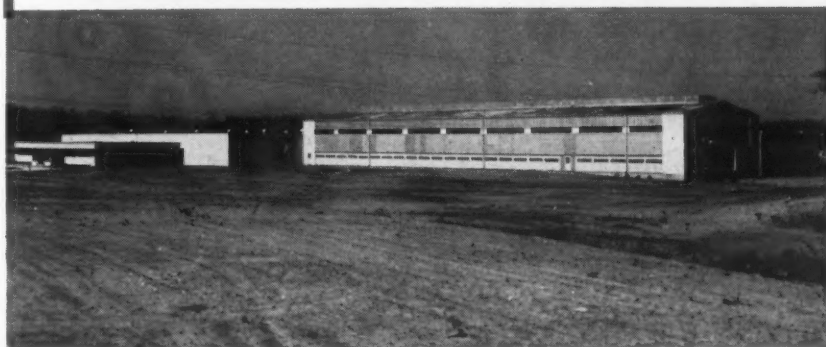
Vanderbilt University provided the remainder of the capital needed for the plant, through a mortgage arrangement.

Rockwell drew up blueprints for the plant it wanted, turned them over to the local development group which arranged for construction.

The plant began limited operations last year and now has a payroll of about 100 people (most hired locally).

Rockwell's rent is paid to a local bank which in turn distributes payments to bondholders and to Vanderbilt University. The entire investment will be repaid in 10 years; then Rockwell will have an option to renew its lease at a reduced rent.

Says Joseph Copple, secretary of Russellville's development organization: "We couldn't be more enthusiastic about the way this has all worked out."



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MANAGEMENT METHODS

PROFILE OF A NEW KIND OF MANAGER

(continued from page 89)

tract new industry, I'm sure there wouldn't be those constant complaints to contend with.

Q. *How do you go about investigating a prospective plant site?*

A. After our consultants have narrowed their recommendations to a specific location, we try to establish the broadest possible personal contact between our own management people and a broad cross-section of community residents. We study the files of the community newspaper, quietly appraise current political, economical and social activities of the town. If there are any other industries in town, we talk at some length with the management of each to ascertain community attitudes, sense of responsibility and similar characteristics—as fellow industrialists view them.

We also depend on our modest powers of observation. It's surprising what you can find out just walking around town and noticing the houses and lawns, the churches and playgrounds.

We try to accurately measure transportation facilities, the labor supply, and the adequacy of the utilities. We study weather conditions and the tax structure. We note whether industry is being invited in on a haphazard basis, or whether firms are being carefully screened on the basis of their real ability to contribute to the community.

Q. *Does an offer of a tax holiday weigh heavily in your decision on whether or not to locate in a particular area?*

A. Obviously, we attempt to locate new facilities in places where local tax history has been good. We don't expect advantages which would discriminate against other industry or local residents. Certain

states, in order to attract new industry, have granted tax relief to cover early years when profits may be slim. These benefits generally may carry some weight in arriving at a decision.

Q. *What approach does your company find most successful in negotiating to acquire other firms? Do they usually come to you, or do you usually go to them?*

A. We have found that the direct approach is not the best. In fact, we have never had much success with companies we have approached saying we would like to make a deal. I don't know why. It's not particularly because of the price. Our success has come through the indirect approach. For example, if we notice a company that we would like to see become a part of Rockwell, we might quietly contact the firm's bank, or one of its major stockholders, or its legal counsel, and ask that, in an indirect way, the subject be broached to the company to find out if they would be interested in talking with us.

Q. *Do you use an industrial broker in arranging these preliminaries?*

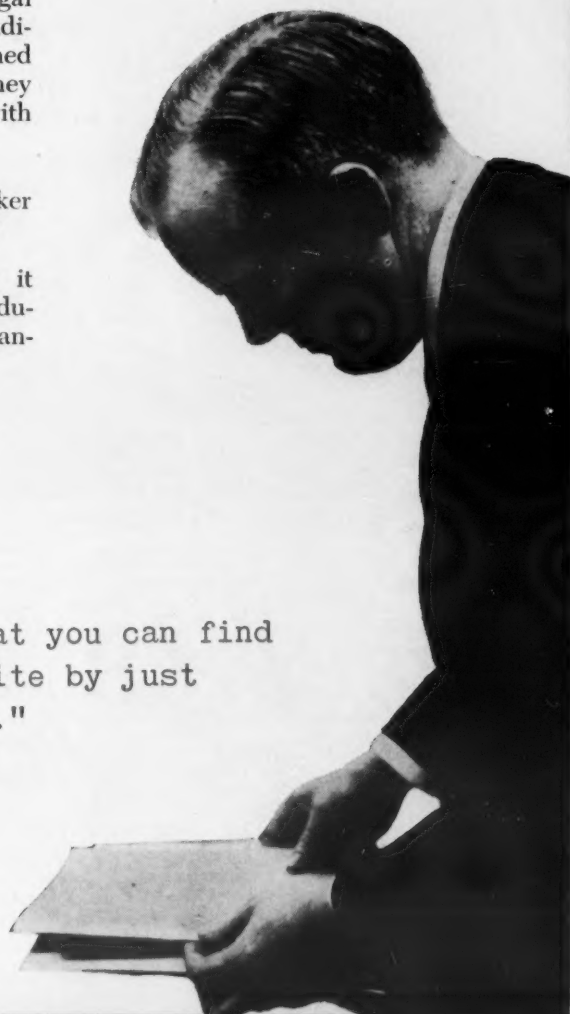
A. Not usually. We feel that it is good experience and good education for our own people to handle these arrangements.

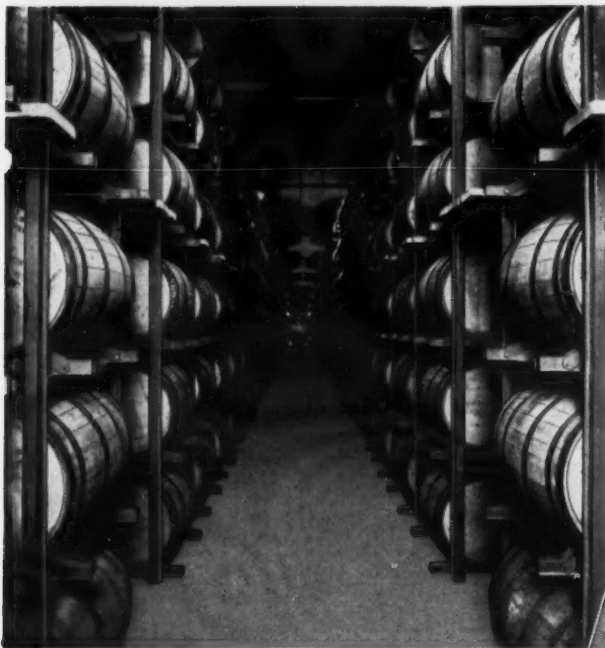
"It's surprising what you can find out about a plant site by just walking around town."

Q. *Specifically how does your top management go about supervising the operations of your various plants?*

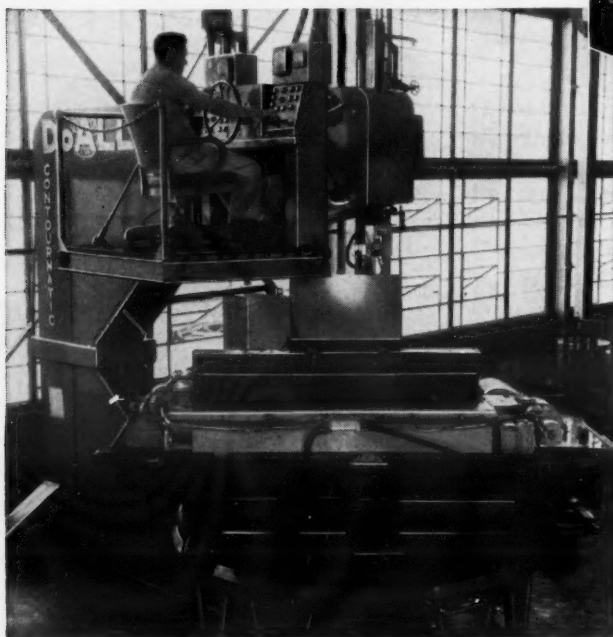
A. Our top men and our staff people are out visiting the plants all the time—auditing what is going on, helping to straighten things out, checking. In addition, to the scheduled visits, any time a plant manager is in trouble, he is encouraged to call and say, "Come on in and help me solve such and such a problem," or, "Send someone in to spend the day with my purchasing agent." We don't permit the plants, of course, to use this top management availability as a crutch; rather we use it as a means of developing our plant people—making them even stronger managers.

(continued on page 93)





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MANAGEMENT METHODS

PROFILE OF A NEW KIND OF MANAGER

(continued from page 91)



"Particularly in a company like ours, the key factor in determining your profit is how well you control your sales costs. We constantly seek new ways to cut distribution expense."

Frank P. Maxwell
Vice President

Q. Well, what methods do you use to coordinate the management people in all your plants into a unified team?

A. The answer can be given in one word: communication. We do everything we can to keep our plant management up-to-date on what is going on in other plants and what is going on company-wide. We try not to hold anything back. In addition to continual top management visits, we have evolved a very complete program of formalized two-way communication.

Q. Could you describe some of the specific methods included in this program?

A. One method we use to get information out to the plants is a series of monthly and quarterly newsletters. For example, my staff and I prepare a monthly Presi-

dent's Letter for top management, department heads, plant managers and sales executives. Its purpose is to keep management informed of current operating status, long and short term planning, and our own thinking on matters affecting the company. Divisional vice president's send a similar letter to the men within their own groups. Then a quarterly newsletter is prepared for all of our management people, down to foremen—about 600 men.

To get information back from the plants we use activity reports prepared by plant managers and department heads.

We get a two-way exchange of information at our week-long management meeting held in February or March every year. Plant managers, corporation staff men and regional sales managers take part in these meetings. I conduct the program for three days, and

then the divisional vice presidents take over during the next three days. Our purpose here is to inform plant managers and the sales organization of company-wide policies and plans for the long term, as well as to provide an opportunity for an exchange of facts.

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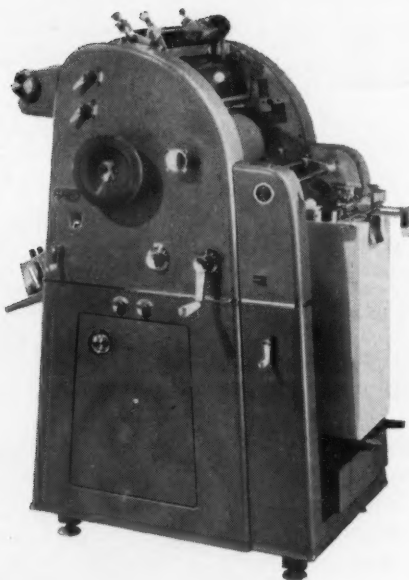




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PROFILE OF A NEW KIND OF MANAGER

(continued from page 93)

"You can't lick the stigma of following your father in business; the best bet is to simply let the chips fall where they may."



Q. Finally, Mr. Rockwell, what about you as a person? Have you had a stigma to overcome as son of the founder and board chairman of Rockwell Manufacturing Co?

A. Yes, initially I did have a problem. Sometimes it's kind of tough. You never get full credit for what you might be able to accomplish. When you follow your father into a top management job, some people will always believe that the only reason you are there is because you've been kicked into it. But I've found that if you worry about things like that you get premature grey hair. You can't lick it so you might as well let the chips fall where they may.

Q. Do you feel that a man who follows his father is motivated to work particularly hard in order to prove he has the same ability as the executive who works his way up from the bottom?

A. I don't know whether you're inclined to work harder or not. You see both ends of the extreme. I think if you are thrown the responsibility, the natural reaction is to try to handle it and learn from your experience just as anyone else does. A very good friend of mine made this statement to me one time—he said if the son of a successful businessman isn't more successful than his father, then there's something wrong with the son or there's something wrong with the father. Maybe from that you can conclude that I work hard to prove

there is nothing wrong with The Colonel.

On the other hand, I enjoy working hard. I think I'd be an unhappy man if I didn't keep going. Most of all, there are a lot of fine people in this company with whom I enjoy working. We feel that we are accomplishing something and we're having a lot of fun working together to keep the company headed in the right direction. m/m

Next month MM reports how Rockwell attacks the selling problems connected with its diversification. Reprints of the combined articles will be available.

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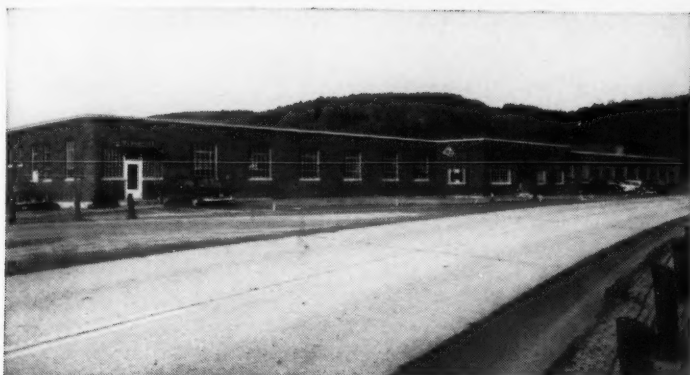
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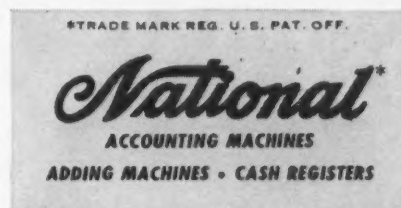
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